



Oak Spring Garden Library

about 300 colored drawings
over 400 Sowerby plates
hundreds of sketches

Text and plates are
the work of James Sowerby

[this is the considered
opinion of W. S. Sarsen
Secretary-treasurer of the
Linnæan Society]

James Sowerby d. 1822.



Myosotis Scorpioides

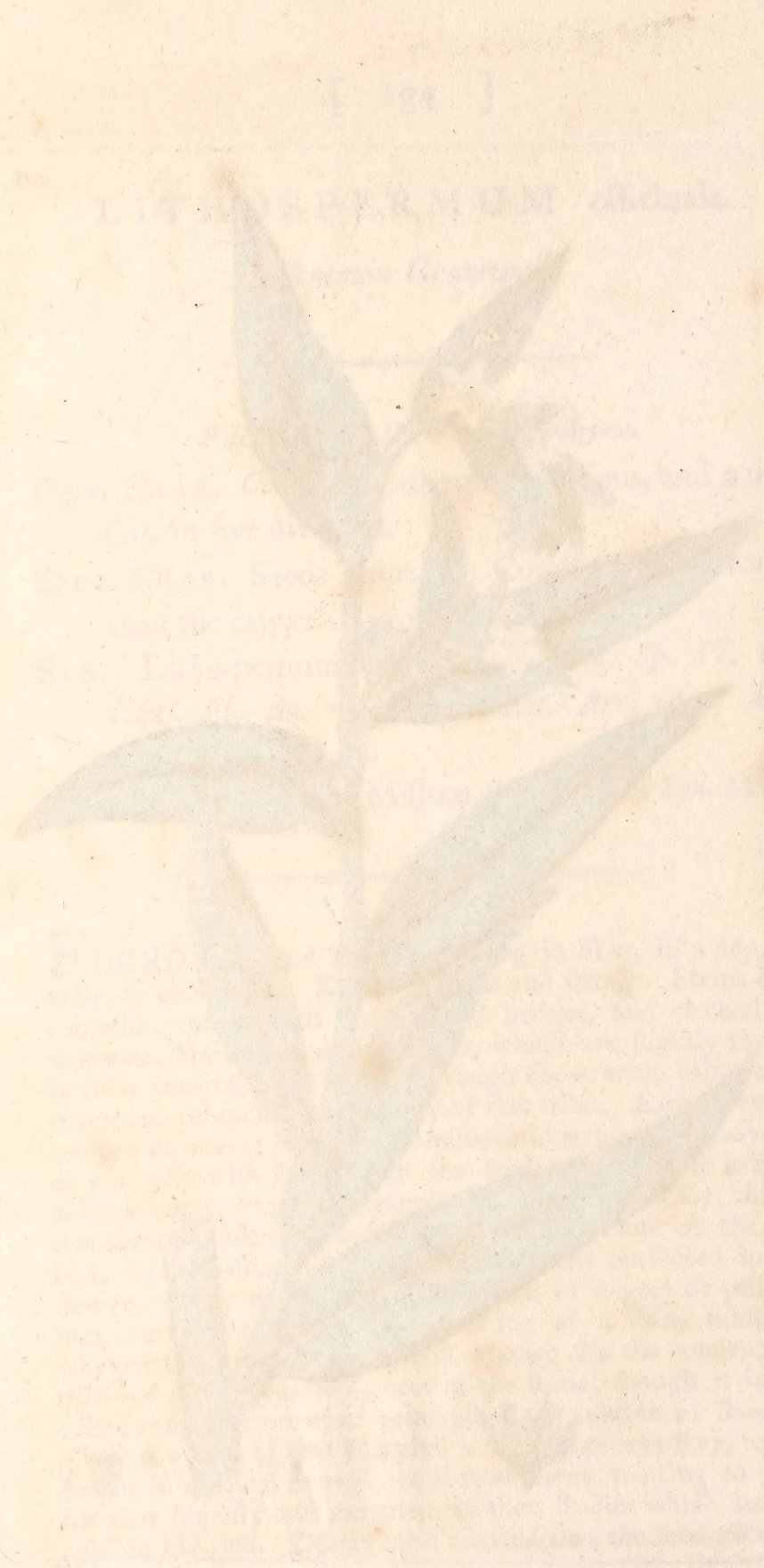
Mouse Ear Scorpion Grass

Pentandria Monogynia

Gen. Ch. Cor. 5 Cleft. Salver shaped slightly
notched its orifice closed with concave
valves

Spec. Ch. Seeds smooth. Leaves elliptic lan-
ceolate. Clusters of many flowers without
Bracts

The smaller variety of this plant represented
entire in our figure is common on dry sandy
or gravelly hillocks generally near Water
upon Leaths it is also frequent in fallow fields
& a still smaller variety with flowers entirely
yellow grows on Walls. The large variety
is said to be perennial. it grows in ditches
& clear Springs to which its enamelled blue
flowers generally pink in the bud are a distin-
guish'd ornament





Published by J. Sowerby Sep. 1. 1793.

LITHOSPERMUM officinale.

Common Gromwell.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* funnel-shaped, pervious, and naked.
Cal. in five divisions.

SPEC. CHAR. Seeds smooth. Corolla scarcely longer than the calyx. Leaves lanceolate.

SYN. *Lithospermum officinale.* *Linn. Sp. Pl.* 189.
Huds. Fl. An. 79. *With. Bot. Arr.* 189. *Relb. Cant.* 76.

Lithospermum, seu *Milium Solis.* *Raii Syn.* 228.

FOUND here and there flowering in May, in a dry, gravelly, or chalky soil. Root perennial and strong. Stems erect, roundish, rough with close-pressed bristles, and clothed with alternate, lanceolate, entire leaves, which are slightly revolute in their margin, hairy beneath, rough above with minute cartilaginous tubercles, as in many of this tribe. Each of the numerous flowering branches terminates in a recurved leafy spike of pale yellowish flowers; in the seeding state these branches become erect, much elongated, and the leaves they bear are considerably enlarged, being broader than those on the stem. It is seldom that more than two seeds are perfected in each flower. They are exquisitely polished, of a grey or yellowish hue, very hard, but brittle, seeming of a stony substance; whence the generic name, and whence also the ancient celebrity of these seeds as a cure for the stone, though it is difficult to imagine on what principle stony substances should be given as a cure of that complaint. The excellent Ray, too credulous in medical matters, celebrates them, trusting to others for that honesty and judgment in their studies which he exercised in his own. Others have asserted that the seed effervesces with acids; but Linnæus (*Fl. Suéc.*) contradicts this, and we have carefully made the experiment without success.



LITHOSPERMUM arvense.

Corn Gromwell.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* funnel-shaped, pervious and naked.
Cal. in five divisions.

SPEC. CHAR. Seeds rugged. Corolla obtuse, scarcely longer than the calyx.

SYN. *Lithospermum arvense.* *Linn. Sp. Pl.* 190. *Huds. Fl. An.* 79. *With. Bot. Arr.* 189. *Relb. Cant.* 76.
Buglossum arvense annuum, Lithospermi folio. Raii Syn. 227.

FREQUENT in corn-fields and waste places, flowering from May to July. The root is annual, small, and not much branched; its bark abounding with a deep red dye, which stains paper, linen, &c. of the same colour, and is easily communicated to oily substances. Hence the name of Bastard Alkanet, sometimes given to this plant. Linnæus, in *Flo. Suecica*, says, the country girls in the north of Sweden use the root to paint their faces, by which they should seem to be terribly deficient, either in healthy natural bloom, or in taste.

The stem is often very much branched, round, rough, clothed with alternate, lanceolate, entire, rough and rigid leaves, in the axillæ of the uppermost of which the flowers stand solitary, nearly sessile. The corolla is small and white, with five swellings around its orifice, exactly as in *L. purpureo-cæruleum*, t. 117. Very near the bottom of its tube stand the 5 very short and minute stamina, on a level with the style, which is about half as long as the tube. The seeds are brown, rugged, and produced in great abundance, so that the plant is often a very troublesome weed.

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LITHOSPERMUM purpuro-cœruleum.

Creeping Gromwell.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* funnel-shaped, pervious, and naked. *Calyx* in five divisions.

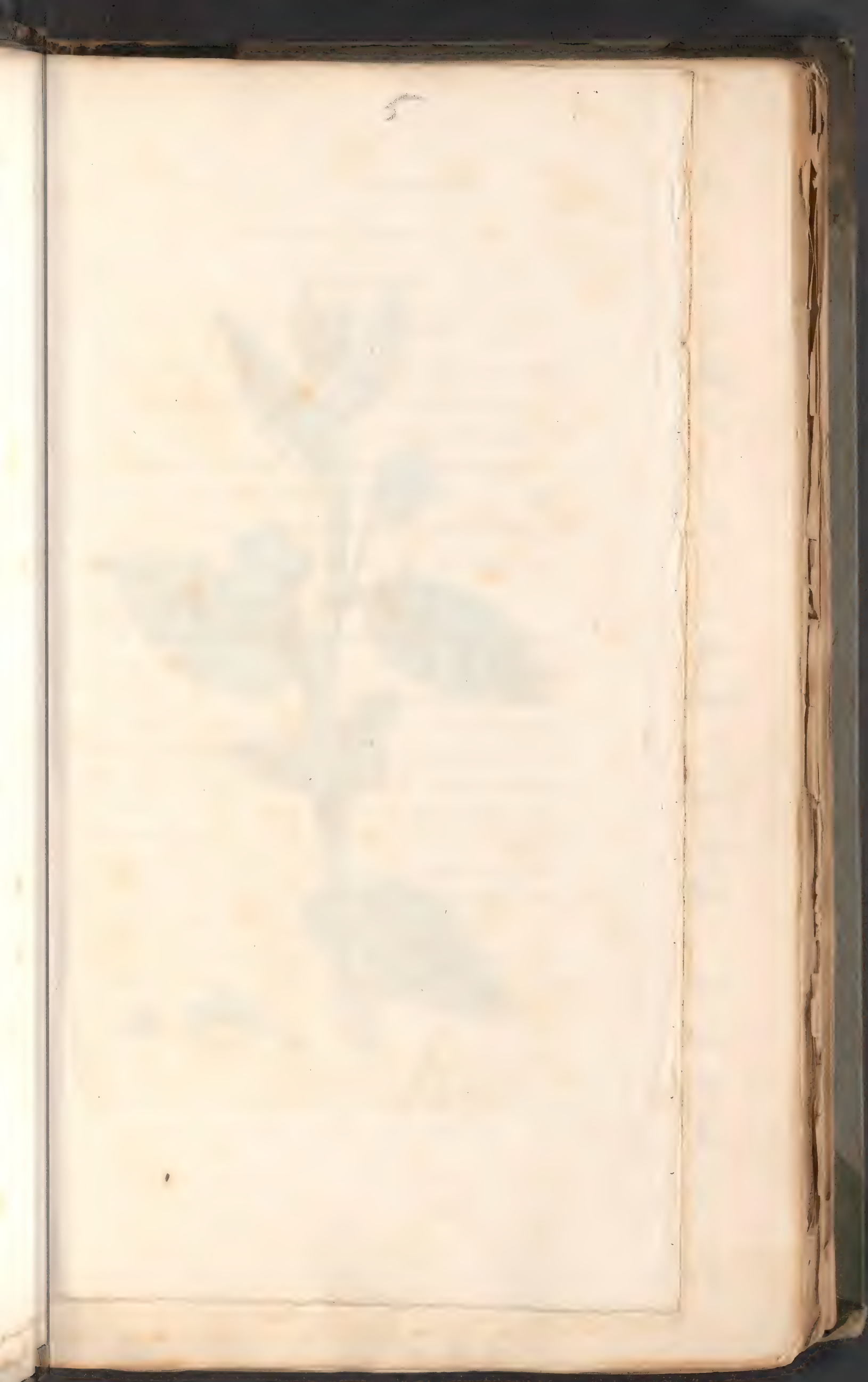
SPEC. CHAR. Seeds smooth. *Corolla* obtuse, much longer than the calyx. Leaves lanceolate. Barren stems creeping.

SYN. *Lithospermum purpuro-cœruleum*. *Linn. Sp. Pl.* 190. *Huds. Fl. An.* 79. *With. Bot. Arr.* 190.

L. majus Dodonæi, flore purpureo, semine *Anchusæ*. *Raii Syn.* 229.

MR. Latham of Dartford, the celebrated ornithologist, has favoured us with wild specimens of this uncommon species of *Lithospermum*, collected by himself in a chalky soil not far from Greenhithe in Kent. It has hitherto been found only in two or three spots in the west of England, being most abundant in the more temperate parts of Europe.

The long woody perennial root produces many round, hairy, leafy stems, most of which are procumbent, and throw out roots: the flowering ones only are perfectly erect, and about 12 or 18 inches high. Leaves numerous, alternate, lanceolate, acute, clothed with short close-pressed bristles, which on the upper side of the leaf often arise from minute white tubercles or warts, as in many of this natural order. The beautiful flowers appear in April or May, standing erect in a sort of double leafy spike, whose extremities are a little curved downwards before flowering. *Calyx* hairy, divided to the base into five very narrow linear obtuse segments. *Corolla* about twice as long (not several times longer), first purple, then blue, with a pale reddish tube; around its orifice are five blunt hairy swellings, which however do not close it. The stamina are somewhat shorter than the tube, and united with that part half way up. Style about as long, with a slightly-notched stigma. Germen and seeds very smooth; the latter are frequently abortive, as in most plants that increase much by their roots.





ANCHUSA *sempervirens*.*Evergreen Alkanet.**PENTANDRIA Monogynia.*

GEN. CHAR. *Corolla* funnel-shaped: its orifice closed with valves. *Seeds* hollowed out at the base.

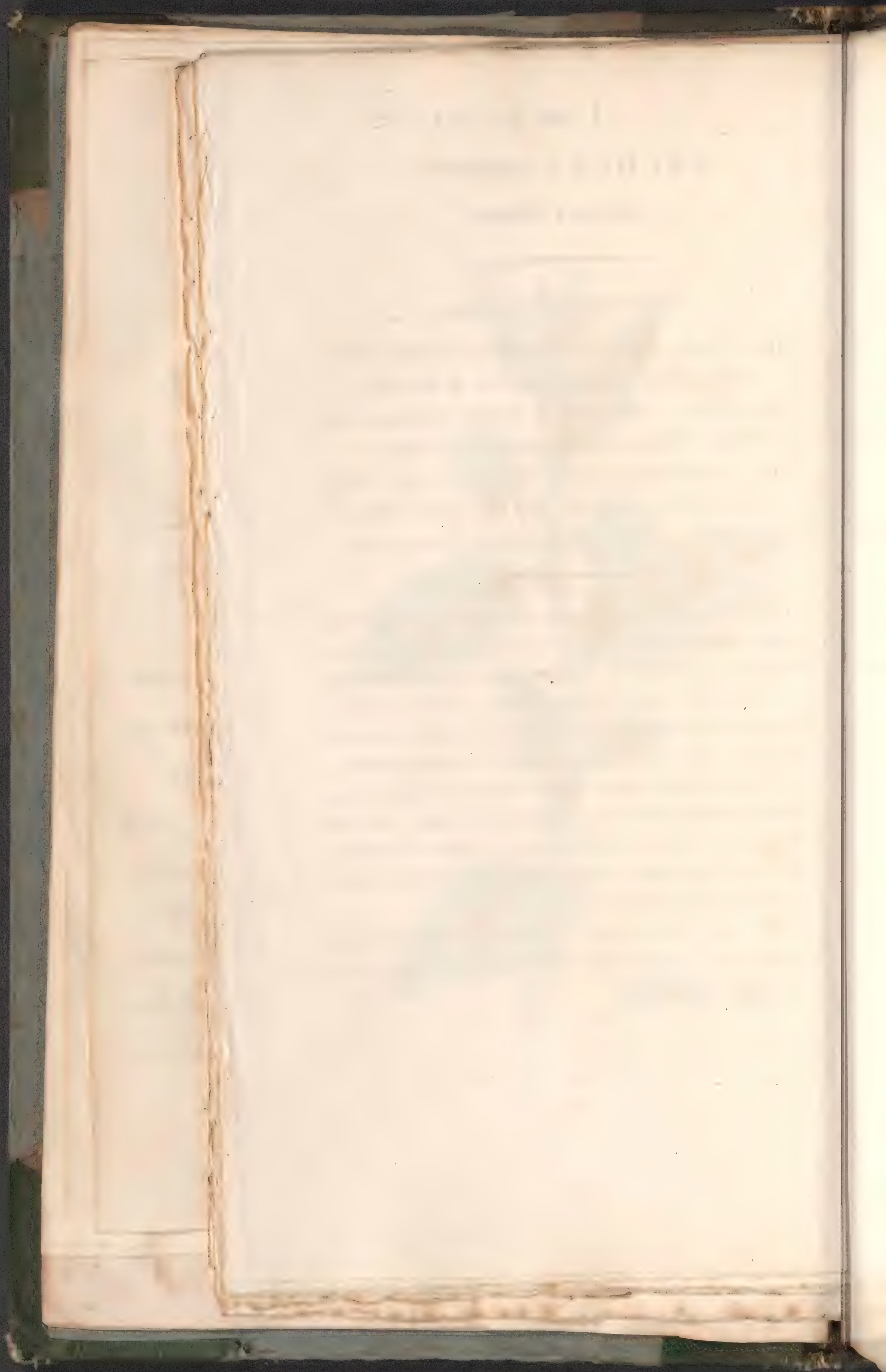
SPEC. CHAR. Flower-stalks axillary, bearing little heads of flowers, accompanied by two leaves.

SYN. *Anchusa sempervirens*. *Linn. Sp. Pl.* 192. *Huds. Fl. An.* 80. *With. Bot. Arr.* 191. *Relb. Cant.* 77.

Buglossum latifolium semper virens. Raii Syn. 227.

NO plant can be more common than this is in waste ground in and about Norwich; throughout most other parts of England it is rarely met with. The first flowers appear in May, and are followed by a long succession of others. They are beautiful in their form and colour when closely examined, otherwise the plant is of an unseemly appearance; it is always, however, in leaf, and has from thence obtained the name of *sempervirens*, though perfectly herbaceous, and not at all shrubby. Its habit and generic characters approach nearly to those of *Myosotis*, the corolla being rather salver-shaped, than of the true funnel form of other species of *Anchusa*.

The leaves are very rough; the juices of the plant mucilaginous, as in others of this tribe. We do not know of its being applied to any use.



Archives 3

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Archusa officinalis - Common Alkanet

Pentandria monogynia

Gen. Ch. Cor. funnel shaped - its orifice closed with valves - Seeds hollowed out at the base

Spec. Ch. Spike imbricated the flowers all on one side - Bractea ovate leaves lanceolate

For this entirely new accession to the Catalogue of British Plants we are indebted to the Rev^d Thos Butts who found it plentifully on the banks near Hardley Pans in Northumberland. It is perennial flowering in June & July - Root spindle shaped black on the outside whole herb rough with bristly hairs. Stem about 1½ or 2 feet high erect angular hoary a little branched panicle at the Top - leaves alternate lanceolate acute entire scarcely at all wavy or crisped in the margin the upper ones ovate at the base - Spikes generally in Pairs revolute - all the flower

ers thickly set on one side & pointing upwards
As the stalk lengthens they become more
remote Bractee ovate. Cal. deeply 5 cleft
Cor. red at first then deep purple closed
with hairy concave Valves— Seeds brown
pointed with a little space hollowed out
at their Base— The whole Plant is mu-
cilaginous but neither its sensible Qualities
nor any Effect it produces in practice are suf-
ficient to account for its ancient Reputa-
tion as a Cordial —

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Cynoglossum officinale. Com. ^m Hoar's tongue

Gentiana Monogyna

Gent. Cor funnel shaped ovate closed
with arched valves. Seeds depressed
fix'd to the style by their inner margin only

Spe. lth. Stamens shorter than the Cor.
Leaves broad lanceolate, downy beneath

Abundant in waste ground & by Road
Sides flowering in June & July

Root biennial. Whole herb downy & soft
to the touch exhaling a strong false smell
like that of Mice. or as some say the urine
of dogs whence the Plant has obtained a name
the 'appropriate' denomination. — Stem about
2 feet high round often furrowed leafy
Leaves remarkably soft & flexible entire
waved rising of a dull grayish green
The lowermost largest stalked lanceolate
upper ones embracing the stem & almost heart
shaped. Flowers in terminal numerous
clusters growing out into spikes forming a
Panicle — Cal downy. Cor. dull purplish
red its lobes rounded as are also the little

Hollow valves that close the mouth & conceal
the stamens. Style acute. Seeds 4 ho-
mogenous obovate attached by their points
each clothed in a flat thick coat rough
with numerous hooked prickles by which
the seeds stick to the coats of animals &
are readily dispersed.

The *Cynoglossum* is narcotic & styptic
& mucilaginous but dangerous to be taken
internally or used in quantity

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PULMONARIA officinalis.

*Common Lungwort.**PENTANDRIA Monogynia.*

GEN. CHAR. *Corolla* funnel-shaped, pervious. *Calyx* prismatic, five-sided.

SPEC. CHAR. *Calyx* nearly as long as the tube. Upper leaves ovate, acute, rough.

SYN. *Pulmonaria officinalis*. *Linn. Sp. Pl.* 194. *Huds.*

Fl. An. 81. *With. Bot. Arr.* 193.

P. foliis Echii. *Raii Syn.* 226. *Ger. em.* 808.

HOWEVER common in every garden, the *Pulmonaria* is of very unfrequent occurrence with us in a wild state, inasmuch that authors are not agreed about the identity of our British species (see *Withering*). We have fortunately obtained, by the favour of Mr. E. Robson, a wild specimen from near Darlington, which being compared with the Linnean herbarium, decides the *P. officinalis*, at least, to be a British plant. Mr. Goodyer's plant from the New Forest is most probably the same. How far the real *P. angustifolia* (*Herb. Linn.*) may be specifically distinct, we dare not determine. The *P. maculosa*, *Ger. em.* 808. *f.* 1. should seem to be a broad-leaved variety of ours, from whence the specific character of *Linnaeus* was taken, which we have ventured to alter that it may better accord with our specimens, and indeed with his own, which exhibit the usual appearance of the wild plant throughout Europe. In Italy nothing is more common in groves and thickets.

The root is perennial; stems simple, erect, near a foot high, angular, and rough. Lower leaves much lengthened out at the base, of a light green; the upper ones only, which are ovate, and rather broad, being speckled with white on the upper side. This however is a variable circumstance. The flowers appear in April or May. The plant loves shade. Every part is mucilaginous; but its reputation as a cure for coughs, arose not from that circumstance, but from its speckled appearance, resembling the lungs!

Much conformity is observable between the structure of this flower and that of *Lithospermum purpuro-coeruleum*, *t.* 117. Indeed the genera of many of the *Asperifoliae* are somewhat too nearly allied.

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Palmerston 5-

PULMONARIA *maritima*,*Sea Lungwort.**PENTANDRIA Monogynia.*

GEN. CHAR. *Cor.* funnel-shaped, pervious. *Calyx* prismatic, five-sided.

SPEC. CHAR. *Calyx* short. Leaves ovate. Stem much branched, procumbent.

SYN. *Pulmonaria maritima*. *Linn. Sp. Pl.* 195. *Huds. Fl. An.* 81. *With. Bot. Arr.* 194. *Dicks. H. Sicc. fasc.* 1. 3. *Lightf. Scot.* 134. t. 7.

Echium marinum. *Raii Syn.* 228.

A BEAUTIFUL ornament of the sandy sea-coasts of Scotland and the north of England, for specimens of which we are obliged to Mr. Robson. It flowers in July, and is perennial according to the opinion of most authors, though the observations of Dillenius in the *Hortus Elthamensis* seem to prove it biennial. There is no less uncertainty about the genus of this plant. It is certainly a very bad *Pulmonaria*, the calyx being too deeply divided to be deemed prismatic, which is also the case in *P. virginica* & *sibirica*. Dillenius (as well as Linnæus formerly) made it a *Cerinth*e, with which it most agrees in habit, but the essential character of *Cerinth*e is not to be found in the fruit. In fact the genera of this order (*Asperifolia*), though so multiplied, are many of them ill defined and unnatural, as we have before observed, p. 118.

The root is fleshy. Stems procumbent, much branched. Leaves ovate, entire, undulated, covered with a beautiful glaucous efflorescence, and sprinkled with minute cartilaginous tubercles, characteristic of the order. Flowers on longish simple flower-stalks, one or two together, sometimes axillary, and generally clustered about the extremities of the branches. *Calyx* glaucous, in 5 ovate acute segments, its base a little prismatic. Corolla with a short thick tube, and a small border in 5 obtuse segments, red at first, then blue; orifice a little toothed, but pervious. Stamina inserted about the middle of the tube, and projecting beyond the orifice. Stigma capitate. The whole plant turns black in drying, unless it be first immersed in fresh water for 24 hours to extract the sea-salt, according to Dillenius.

Longfellow 6





[Faint handwritten text from the adjacent page, partially visible on the right edge.]

Symphytum officinale - Common Comfrey

Pentstemon Monogynus

Gentle bend of the Cor. tubular swelling
its orifice closed with awl shaped rays. Cal
in 5 deep segments. Seeds 4 naked

Sp. Ch - leaves ovate lanceolate decurrent

A frequent native of watery places banks
of Rivers & about Ditches flowering from
the end of May to Sept. Root perenn. fleshy
externally black. Stem 2-3 feet high
upright leafy winged branched at the top
clothed with short bristly hairs that point
rather downwards. Leaves decurrent over
to lanceolate narrow pointed veiny rough
the radical ones on foot stalks & broader
than the rest. Clusters of flowers in pairs
on a common stalk with an odd flower
between them recurved dense hairy Cor.
yellowish white sometimes purple the rays

downy at each edge—

The cornucop root abounds in a pure
tartarous mucilage like that of the Marsh
Mallow & being as Dr Woodville observes
more easily obtained it ought not to be
omitted in lists of medicinal Plants—

Such Medicines are useful in Irritations
of the throat intestines & above all the
bladder

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J. Sowerby del. Oct. 1. 1791.

BORAGO officinalis.

Common Borage.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* wheel-shaped: the orifice closed with rays.

SPEC. CHAR. Leaves all alternate. Calyx spreading.

SYN. *Borago officinalis.* Linn. *Sp. Pl.* 197. *Huds. Fl.*

An. 82. *With. Bot. Arr.* 197. *Relb. Cant.* 78.

Borrago hortensis. *Raii Syn.* 228.

THE Borage, whose bright blue flowers decorate almost every dunghill and heap of rubbish, is one of those vegetables which, although not originally of British growth, are now so perfectly naturalized as to find a place in every catalogue of our wild plants. It is said to have been brought from the Levant; and was at first cultivated in gardens as a medicinal herb, being reckoned, apparently without reason, one of the four cordial flowers. Hence the old adage,

“Ego Borago gaudia semper ago”—

which Gerarde renders,

“I Borage bring always courage—”

a translation worthy of the elegance of the original. The same author adds from Dodonæus—

“Those of our time do use the floures in sallads, to exhilarate and make the minde glad. There be also many things made of them, used for the comfort of the heart, to drive away sorrow, and increase the joy of the minde.”

Very light surely were those sorrows that could be so driven away! Yet the Borage flowers were at least innocent, which is more than can be said of many more general remedies for care.

The whole herb is succulent and very mucilaginous, and has a peculiar faint smell when bruised. All the green parts are extremely hispid, with sharp rigid white bristles. The root is scarcely more than biennial with us. The flowers appear in great plenty in the summer months.

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Asperugo procumbens - German Madewort

Pentandria Monogynia

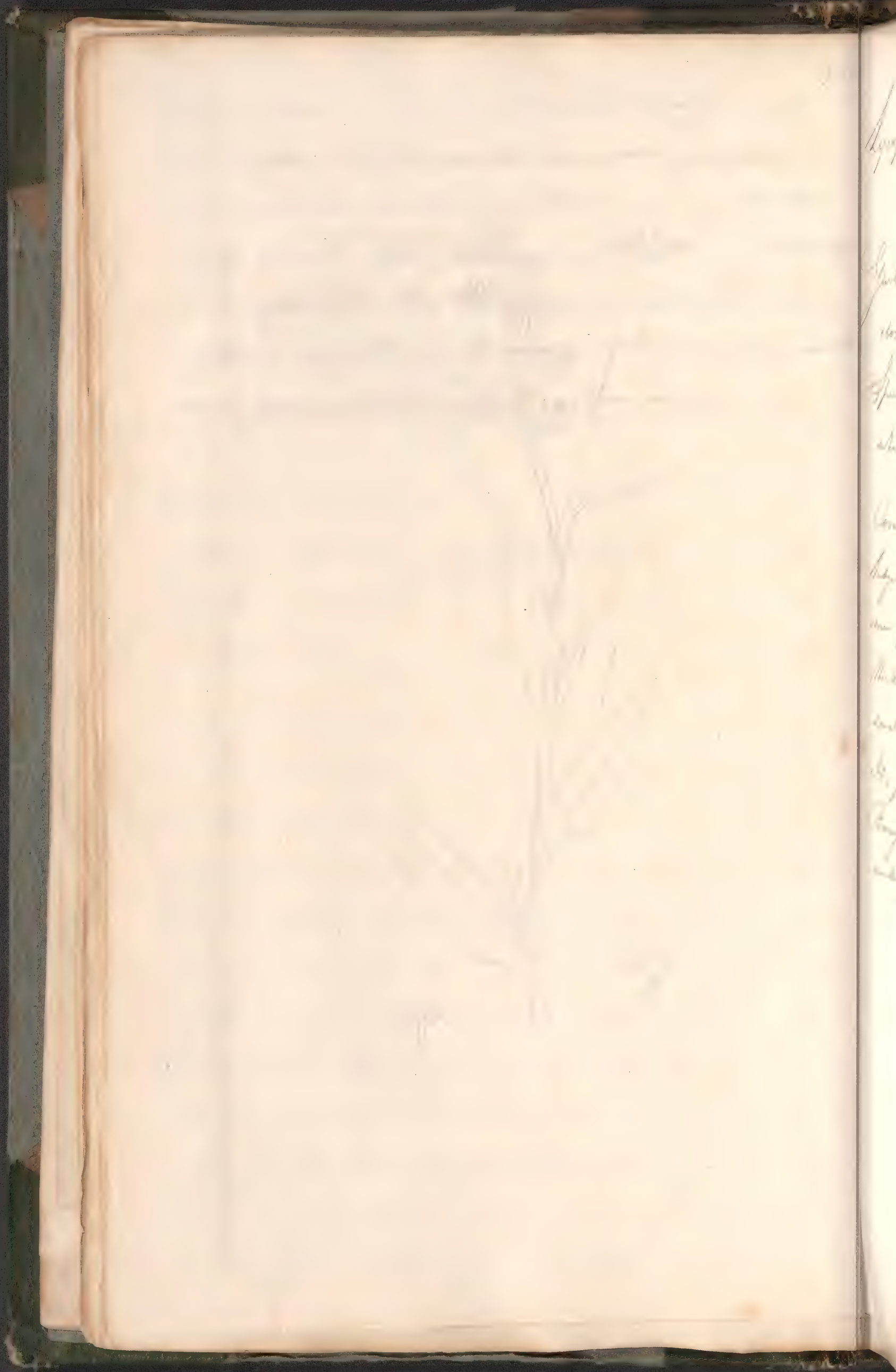
Gen. Ch. Cal of the fruit compressed
its 2 margins flat & parallel. serrated

Spec. Ch. Cal of the fruit flattened throughout

A. Plant of very rare occurrence this was found at Weyford near Brandon - it is an annual & flowers in July. Root small & slender. Herb rough & sticking to the hands or clothes by means of small hooked spines like *Galium aparine* - hence it has been called *Aparine major* & *goose grass* - Each of these hooks as it stands up on the stem point downwards those on the leaves forward or towards the point of the leaf. Stems prostrate square leafy - leaves 2, 3, or 4 together not exactly opposite spreading when the plant is supported when it lies flat they are directed upwards from the ground - they are oblong lanceolate & entire - Flowers small & illory solitary on short stalks

deep blue - Cor. in 5 rounded segments
its orifice closed with small purple con-
cave blunt valves - Stamens in the tube
very short after flowering the flower stalks
are reflexed the Cal much enlarged com-
pressed unfolding 4 seeds which are smooth
in a young state rough when ripe

Lycopodium 9



Lycopsis arvensis - Small Bugloss

Penlandria Monogynia

Gulth Cor with a curved tube the mouth closed with convex scales. -

Spurth leaves lanceolate brassy - Cal white in flower erect

Common every where, in fields & on dry hedge banks. During the early part of Summer flowering chiefly in June - after which the herb is dried up scatters its seeds & the small annual root withers away

Its juices are mucilaginous like those of Borage to which it is nearly akin however widely different in the Cor. & Stamina



del. J. C. 1704

ECHIUM vulgare.

Common Viper's Bugloss.

PENTANDRIA Monogynia.

GEN. CHAR. Cor. irregular, its orifice open and naked.

SPEC. CHAR. Stem bristly and tuberculated. Stem leaves lanceolate, and rough with stiff hairs. Flowers in lateral spikes.

SYN. Echium vulgare. *Linn. Sp. Pl.* 200. *Huds. Fl.* An. 83. *With. Bot. Arr.* 200. *Relb. Cant.* 80. *Raii Syn.* 227.

A BEAUTIFUL and magnificent, though very vulgar weed, whose frequency in every high-way and field, especially in a light soil, makes us despise it as an unprofitable intruder; yet we have seen inhabitants of tropical countries, on their arrival in Europe, so charmed with the viper's bugloss, as to call it worthy to "decorate the gardens of the gods." The dry fields of Cambridgeshire and Norfolk are perfectly blue with these flowers in June and July, nor is any part of England without more or less of them.

The root is biennial. Stem strong, erect, round, mostly sprinkled with red tubercles bearing some of the very stiff bristles which clothe every part of the herb, and which on the upper side of the leaves arise from white callosities. The radical leaves are numerous, spreading in the form of a star. Spikes solitary from each axilla of the stem-leaves, pendulous, but growing erect as the flowers open. Buds red. Corolla nearly regular, purple, then bright blue, downy on the outside about the ribs. Stamina varying in length, but always somewhat longer than the corolla. The juices of the herb are very mucilaginous.

We can scarcely define the difference between this and *E. italicum* (for in this case the Linnæan characters unfortunately teach nothing), except that the stalk of the latter seems not to be tuberculated, and the flowers are not half so large as in *E. vulgare*.

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L. Townshy del. Jan. 29. 1794.

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PRIMULA vulgaris.

Common Primrose.

PENTANDRIA Monogynia.

GEN. CHAR. Capsule 1-celled, superior. Tube of the corolla cylindrical, mouth pervious. Stigma globose.

SPEC. CHAR. Leaves dentated, wrinkled. Border of the corolla flat.

SYN. Primula vulgaris. Hudf. Fl. An. 83.

P. acaulis. Witb. Bot. Arr. 204.

P. veris var. γ . Linn. Sp. Pl. 205. Fl. Dan. t. 194.

P. veris vulgaris. Raii Syn. 284.

LINNÆUS, ever desirous of avoiding too great a multiplication of species, considered the Primrose, Oxlip and Cowslip, as varieties only of each other; but most botanists have differed from him in this particular. Some have gone so far as to reckon them three distinct species. It seems however most agreeable to nature to consider the first and last as distinct, though much more nearly akin than an inexperienced observer would suppose, and the rim of the corolla being concave in one and flat in the other, is a sufficiently good specific character.

The Oxlip (P. veris β of Linn. Fl. Dan. t. 434.), if not an hybrid production between the other two, may perhaps with the greatest propriety be reckoned a variety of the Primrose, from which it principally differs in having an elongated common foot-stalk, like the Cowslip; whereas the common foot-stalk of the Primrose is so short as to be concealed among the leaves, as Linnæus and Dr. Stokes have observed. This plant is found every where in woods, thickets, and pastures, flowering in April and May. Its blossoms have an agreeable fragrance.

“The Primrose pale and Violet blue,” being the chief ornaments of a season which every pastoral poet delights to celebrate, have been more frequently honoured in verse than most other wild flowers.



Veronica filiformis L.

PRIMULA veris.

Common Cowslip.

PENTANDRIA Monogynia.

GEN. CHAR. *Capsule* one-celled, superior. *Tube* of the *corolla* cylindrical, mouth pervious. *Stigma* globose.

SPEC. CHAR. Leaves dentated, wrinkled. Border of the *corolla* concave.

SYN. *Primula veris.* *Huds. Fl. An.* 84. *Linn. Sp. Pl.* 204. *Fl. Dan. t.* 433.

P. officinalis. *With. Bot. Arr.* 203.

P. veris major. *Raii Syn.* 284.

IN speaking of the Primrose we have already mentioned its affinity to this plant; one circumstance is however remarkable in the Cowslip, a contraction towards the middle of its leaves, which is not seen in the former. The Cowslip is nearly as common, and flowers at the same time: it prefers a clay soil, and generally an open situation.

Cowslip flowers are fragrant, and make a pleasant wine, approaching in flavour to the Muscadel wines of the South of France.

The leaves of this plant and the Primrose are said to afford nourishment to silk-worms: but those animals are so very delicate, and the quality of their silk is so apt to be injured by the most trifling causes, that they are seldom found worth cultivating as an article of commerce, unless fed with the best and most healthy leaves of the White Mulberry (*Morus alba*). It is however an object worthy of the curiosity of those who breed them for amusement, to try what kinds of food may best be substituted in the place of their natural aliment, when a backward spring retards the growth of the Mulberry leaves.



J. Lamerby del. Inn^o 1796.

PRIMULA farinosa.

Bird's-Eye Primrose.

PENTANDRIA Monogynia.

GEN. CHAR. *Capsule* one-celled, superior. *Tube* of the *corolla* cylindrical, mouth pervious. *Stigma* globose.

SPEC. CHAR. Leaves crenated, smooth. Border of the *corolla* flat.

SYN. *Primula farinosa*. *Linn. Sp. Pl.* 205. *Huds. Fl. An.* 84. *Witb. Bot. Arr.* 204. *Fl. Dan. t.* 125.

Verbasculum umbellatum alpinum minus. *Raii Syn.* 285.

WE T pastures and little rills on the sides of mountains in the north of England, especially in Westmoreland, are the favourite situations of this elegant plant, nor can our British Flora boast many more beautiful productions. Of late years it has been frequently introduced into gardens. The powdery whiteness of its stalks and the backs of its leaves resembles that of the *Auricula*. This circumstance, from whence the trivial name *farinosa* is taken, is not represented in the *Flora Danica*.

The habit of this *Primula* most nearly approaches that of the genera *Androsace* and *Aretia*, two very elegant tribes of plants found in alpine situations on the continent, and much sought after by botanists. In those genera however the tube of the *corolla* is oval, not cylindrical, and its orifice more or less closed with glands; whereas in all the *Primulas* that part is open, and only slightly crenated. Nevertheless these three genera, and even *Cortusa*, might perhaps be united without any great violence to nature.

Prose 11

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Primula elatior. Ox lip

Pentandria Monogynia

Gen. Ch. Caps. 1 celled superior.

Tube of the Cor. cylindrical mouth
perious. Stigma globose.

Spe. Ch. leaves dentated wrinkled
Stalk many flowered Border of the
Cor. flat

This is much less frequent than the
2 most common kinds of *primula*
nevertheless occurs here & there in Woods
thickets & pastures flowering in April
has a very grateful Smell.

In describing the *Primrose* we
expressed a suspicion that the Ox lip
might be a variety of that rather than
of the Cowslip or possibly a hybrid be-
tween the 2. We are still more inclined
to the latter Opinion & that it has sprung
from a *Primrose* impregnated by a Cow-
slip - its external habit the contraction
towards the middle of the leaf & the umbel-
late flower stalk indicating (according to Linn.)
the father while the blossom itself both in
form Colour & scent resembles $\frac{1}{2}$ Mother

Cyprian 12



Cyclamen europeum. Spring C. or Sowbread

Pentandria Monogynia

Gen. Ch. Cor. wheel shaped reflexed tube
very short orifice prominent. Ovary
superior enclosed in a Case

Spec. Ch. Cor. bent backwards. Leaves
heart shaped angular finely toothed

Wild Specimens of this have been sent
us from a bank in the Parish of Bram-
ley Suffolk far from any house or Gar-
den where if not originally a native
it is perfectly naturalized. The ground
is a wet Clay sloping towards the South
or West & is overshadowed with Trees.

Gerarde was told that this Plant had
been observed in Wales Shropshire &
Somersetshire. It is perennial flowering
in April & in a cultivated state some-
times in Autumn. Root a large
roundish Knot throwing out several
branched fibres. Leaves all radical on
long foot stalks heart shaped roundish or

oblong acute waved & angular - finely or-
nate or toothed being smooth - Stained
above with white radiated or sinuated
spots - purplish beneath - Foot stalks round
slender at the base - flower stalk
like them but longer simple naked
Flowers drooping white purplish about the
mouth their segments upright twisted
Stamina very short not projecting An-
thera oval shaped tawny - Germen su-
perior roundish - Style oval shaped. Sty-
ma acute - After impregnation the stalk
curls in a close spiral manner & bury
the ripening fruit in the Earth

This pretty plant is easily cultivated
in a shady border & its leaves which
are in their greatest beauty in Autumn
are scarcely less ornamental than the
flowers. The root is very purgative &
has a nauseous bitter acrid taste not
at first perceived but very sensible. Ger-
ard believed that merely stepping over
this herb caused abortion & very frequently
garded it in his garden with sticks

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MENYANTHES nymphoides.

Fringed Buckbean.

PENTANDRIA Monogynia.

GEN. CHAR. Corolla hairy. Stigma cloven. Caps. of 1 cell.

SPEC. CHAR. Leaves heart-shaped, entire, waved. Corolla ciliated.

SYN. Menyanthes nymphoides. Linn. Sp. Pl. 207. Hudf. Fl. An. 85. With. Bot. Arr. 206. Relb. Cant. 82. Sibth. Oxon. 73.

Nymphæa lutea minor flore fimbriato. Raii Syn. 368.

Limnanthemum peltatum. Gmelin in Aët. Petrop. anno 1769, v. 14. p. 527. t. 17. f. 2. è MSS. Linn.

Waldschmidia nymphoides. Wiggers Flo. Holsat. 20.

THIS beautiful aquatic is found occasionally in the Thames, chiefly in little recesses of its shores out of the great stream; Lord Lewisham communicated it from near Walton bridge. It is much more frequent in the still canals of Holland than with us.

Root perennial, long and stringy, as are also the stems. They produce a few pair of opposite floating leaves, growing on foot-stalks various in length according to the depth of the water, their margin scarcely toothed, but rather waved. These leaves, like those of the Nymphææ, perspire quicker than almost any others we have observed, so as to become dry in a few hours, though at first so succulent. The flowers grow from the axillæ about August, in a kind of sessile umbel, 4 or 5 together, on long foot-stalks, and when expanded in the sun have a brilliant appearance. Their corolla is ciliated, but not hairy upon the surface like *M. trifoliata*: hence some have thought it did not answer to the generic character, and Wiggers has asserted that it belongs even to a different natural order from the last-mentioned plant, but without telling us why. As Mr. de Jussieu, whose authority is very great upon such a point, has not separated them, and as *M. indica* seems to connect the two, we think they may safely remain as they are.

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Menyanthes trifoliata. Common Buckbean

Pentandria Monogynia

Gen. Ch. Cor. hairy. Stigma cloven. Caps.
of 1 cell.

Spec. Ch. Leaves ternate

Very frequent in Watery Places in a boggy Soil
flowers in June & July

Root perennial long round throwing out
many fibres deep into the Mud. Stem
creeping clothed with the sheathing footstalks,
each of which bears three ovate smooth
bluntly looked or waved leaflets. Flower
stalk opposite to a leaf but springing from
within its sheath longer than the leaves erect
and smooth bearing a simple thyrsus of
about 12 or 15 flowers accompanied by small
ovate entire Bractea. Cal. with 5 blunt
teeth Cor of 1 funnel shaped Petal deeply
divided into 5 lanceolate acute segments,

which are white tipped with red & clothed with
long fleshy shaggy filices on their upper side.

This constitutes the proper Char. of the Genus &
in some species the hairy ness is confined to the
Edge in others upon both parts see t 217. Anther
sagittate. Germen round stigma cloven &
notched.

The herb is very bitter an infusion of it was
long ago recommended for the Rheumatism
& has been a popular Medicine in England
It has also been given for the gout Scoury Ap-
ple & Dropsy a formidable list of Dis-
eases - if it has any right to such celebrity it
must act as a powerful tonic

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Dec 1. 1790. Published by J. Bowen by London.

HOTTONIA palustris.

Water Violet or Featherfoil.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* salver-shaped. *Stamina* standing on the margin of the tube. *Capsule* with 1 cell.

SPEC. CHAR. Stalk bearing many flowers in whorls.

SYN. *Hottonia palustris*. *Linn. Sp. Pl.* 208. *Huds. Fl. An.* 85. *With. Bot. Arr.* 207. *Relb. Cant.* 83. *Sibth. Ox.* 73. *Curt. Lond. fasc.* 1. t. 11. *Dicks. H. Sicc. fasc.* 7. 7.

Hottonia. *Raii Syn.* 285.

CLEAR ditches and ponds on a gravelly soil, in various parts of England, are frequently adorned with the beautiful *Hottonia*, which may vie with many of the most admired exotics in elegance, having indeed, like some other European aquatics, very much the air of a tropical plant. Its English name, Water Violet, is far from apt, even though we understand it as contrasting this plant with the Dame's Violet, or *Hesperis*, to which its resemblance is slight, and its affinity none, for it belongs to the same natural order as the Primrose and Pimpernel.

The white fibrous radicles run deep into the ground, and from the crown of the perennial root spring several leaves in a star-like form, and a few long runners, which are leafy and take root at their extremities, flowering the next year. The leaves are smooth, bright-green, elegantly and deeply pinnatifid, or pectinated, their segments linear and entire, varying in breadth, acute. All these parts are constantly under water. The stalk alone rises above the surface to the height of 8 or 10 inches, being solitary, erect, round, naked, smooth below, roughish above, and bearing 5 or 6 whorls, each of 5 to 10 pedunculated flowers, with an oblong bractea at the base of each flower-stalk. The flowers are not unlike those of a *Primula*. They are naturally 5-cleft, but may be found with 6 or 7 segments, and as many stamina. Their colour is pale purple, with a yellow tube and orifice. Capsule globular, with many seeds standing on a large globose receptacle. Stigma concave. It flowers in June.

Boerhaave named this genus in honour of his predecessor in the Leyden Professorship, Peter Hotton, of whose character and abilities he speaks with great respect in his Index to the Leyden Garden.

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LYSIMACHIA vulgaris.

*Yellow Loofestripe.**PENTANDRIA Monogynia.*

GEN. CHAR. Cor. wheel-shaped. Caps. globose, pointed, with 10 valves.

SPEC. CHAR. Panicked. Clusters terminal. Leaves ovato-lanceolate, acute.

SYN. *Lyfimachia vulgaris.* Linn. *Sp. Pl.* 209. Sm. *Fl. Brit.* 227. Huds. 86. With. 237. Hull. 49. Relb. 84. Sibth. 74. Abbot. 45. Curt. Lond. fasc. 5. t. 19.

L. lutea. Raii Syn. 282.

AN elegant ornament of watery shady places, and the reedy banks of rivers, where it intermingles with the Common Valerian, the *Eupatorium*, the *Lythrum Salicaria*, &c. but is much less common than any of them. It flowers in July, and, having a perennial creeping root, may be easily propagated in a garden, even where the soil is not very wet. In a moist one it would soon become a troublesome weed.

The stems rise to the height of 3 feet or more, and are straight, leafy, panicked at the top. The leaves, though generally opposite only, very often grow 3 or 4 in a whorl, almost sessile, of a broad lanceolate form, entire, veiny, frequently downy beneath. Clusters from the bosoms of the uppermost leaves, joining to form a panicle of large handsome yellow flowers. Each partial flower-stalk has an awl-shaped bractea at its base. The divisions of the calyx are pointed and fringed. Corolla spreading, divided almost to the base. Stamina smooth, united at the bottom, so as to be perfectly monadelphous. Seeds numerous and small, not always perfected.

It seems most probable that this herb received its Greek name in honour of Lyfimachus, (as *Gentiana* and *Euphorbia* are ancient names of similar origin,) and that Loofestripe is merely a translation of it. The fable of the plant taming enraged animals, was probably, like many others, the invention of some person of more learning than wisdom.



Lonicera May 1 1760

LYSIMACHIA thyrsiflora.

Tufted Loosetrife.

PENTANDRIA Monogynia.

GEN. CHAR. Cor. wheel-shaped. Capsule globose, pointed, with 10 valves.

SPEC. CHAR. Flowers in lateral pedunculated clusters,

SYN. *Lysimachia thyrsiflora.* Linn. *Sp. Pl.* 209. Huds. *Fl. An.* 86. With. *Bot. Arr.* 209.

L. lutea, flore globofo. Raii *Syn.* 283.

DESPAIRING of procuring recent wild specimens of this very rare plant, we cannot refrain from exhibiting a figure of a cultivated one, which has been compared with wild ones, and found in no respect to differ. It grows in boggy places, about running streams, and was found in Ray's time in the east riding of Yorkshire, as well as about King's Langley in Hertfordshire. Dr. Smith saw, in the year 1781, specimens gathered by Dr. White in a bog near Severus's hills at York; but the plant was then lost, from the place having been drained, so that we really do not know a certain station of this *Lysimachia* at present.

It has a long root with whorls of fibres like many aquatic plants. The stem 10 or 20 inches high, erect, round, perfectly simple, slightly woolly, covered with opposite, lanceolate, entire leaves, which are pale beneath, and somewhat revolute. The bunches of flowers stand opposite, one from the bosom of each leaf about the middle of the stem, erect, pubescent, each of about ten flowers, on partial footstalks, accompanied by solitary lanceolate bractæ. The corolla is very deeply cloven into lanceolate segments, with a small tooth between every two of them. The stamina are capillary, longer than the corolla, and opposite to its segments. Style simple. The calyx, germen, and tips of the corolla are prettily spotted with red. It flowers about midsummer, and may be easily known from all other British vegetables.



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 100. *Hydrophilus*

Lysimachia nemorum. Yellow
Pimpernel or Wood loosestrife

Pentandria Monogynia

Gen. Ch. Cor. Wheel shaped. Caps.
globose pointed with 10 Valves

Spec. Ch. Leaves ovate acute. Flowers
solitary Stem procumbent. Stamina
smooth

The pretty yellow pimpernel of the Wood,
is a great ornament to moist shady
groves flowering from the End of May
to Sep^r Mo in the greatest perfection
& brilliancy about a Week. As the sea-
son advances its long trailing branches
hang elegantly over broken ground or
mossy Rocks among little trickling Rills
while its neat shining Myrtle like leaves
are intermixed & entangled with tufted
Hypnum or the smaller kinds of Fern
Root perennial. Stem procumbent or
pendent taking root from some of the
lower branches branched square red &
pellucid leafy. Leaves opposite on foot
stalks ovate entire being rather succulent
Every part of the herb is smooth - Flowers

on long slender solitary axillary simple
often twisted stalks. Cal. in 5 equal awl-
shaped segments. Cor. spreading divided
about half way or farther into 5 lobes
Filaments smooth shorter than the
Cor.^e Style a little club-shaped with a
simple blunt stigma Caps. superior
globose of 1 cell bursting into 10 valves
which often stick together in pairs or
irregularly in this as in other species
Leaves several roundish

Lepidoptera 15



Hypnum nummularia. Money Wort,
or creeping loosestrife

Pentandria Monogynia

Gen. Ch. Cor. wheel shaped. Caps. globose
pointed with 10 Valves

Spec. Ch. Leaves somewhat heart shaped
Flowers solitary. Stem creeping. Sta-
mina glandular.

Money wort, or Herb tropaeum inhabit,
similar places with the preceding species
or rather the banks of wet ditches, creeping
over the black boggy soil of very moist
meadows or on the margins of shady
rivulets flowering copiously in June
& July. Root perennial. Stems several
perfectly prostrate & creeping quadrangular
but compressed mostly simple. Leaves rather
rounder paler & more undulate than
the last. Segments of the Cal. ovate poin-
ted. Cor. pale lemon col? divided almost
to the base. when magnified it is found
to be clothed with small glands standing
on foot stalks as are also the stamens. The
anthers are arrow shaped. The stigma blunt,
notched. Capsule seldom perfected



Anagallis arvensis - Scarlet Pimpernel

Pentandria Monogynia

Genl. Coro. Whell shaped - Caps. bursting
all round. Stamina hairy

Spec. Ch. Leaves ovate dotted beneath -
Stem procumbent

A common Weed on all kinds of cul-
tivated land flowering all Summer long
every part of it is singularly beautiful & will
well repay the trouble of minute examination

Root annual small - Stem procumbent,
much branched at the bottom - Square smooth
hairy. Leaves opposite rarely in fours. Sepals
ovate entire smooth with ribs & several
longitudinal Veins dotted all over the under
side with purple - flowers axillary solitary
on stalks longer than the leaves - Cal. leaves
lanceolate with a membranous Edge very sharp
pointed - Cor in 5 deep cut roundish segments
minutely crenate or somewhat fringed of a
vivid Scarlet with purple at the base - Stamina

purple fringed with hairs of the same color
Anthers heartshaped yellow - Stigma blunt notched
Caps. globose greenish semitransparent burst-
ing in 2 equal hemispheres - seeds many
angular thickly crowded into a globe -

The blue Pinpernel is supposed to be a
permanent variety of this - Ray mentions a
white one - This pretty flower opens only
in fine weather & closes infallibly against
Rain - hence it is called the poor Mans Wea-
ther glass & is one of the most certain that
can be consulted as we have often experienced

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Anagallis tenella - Bog. Pimpernel

Pentandria Monogynia

Genet. Cor. Wheel shaped - Caps bursting
all round - Stamina hairy

Spec. Ch - Leaves roundish somewhat
pointed on footstalks. Stem creeping
Stigma acute

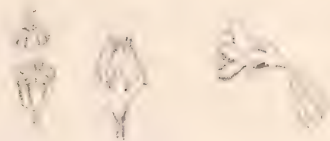
This most elegant little Plant was
sent us from Staffordshire by the Revd
T. Gisborne - it is not unfrequent in wet
Bogs throughout these Kingdoms flowering
in July & Aug^r - Root perennial Stems
spreading in every direction close to the
ground & taking root as they advance they
are slender angular smooth clothed with oppo-
site small roundish or ovate entire smooth
leaves on shortish footstalks. Flowers erect or
very long axillary solitary stalks - Cal. leaves
lanceolate acute - Cor. of an elegant Rose Colr.
deeply divided but with a tubular base so

as to be rather funnel shaped Stamens
clothed with numerous curiously jointed hairs
Anthers roundish - Style long tapering into a
simple acute stigma - Caps. cut round not
often perfected -

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into a
small pit

Section 17

[Faint, illegible handwritten text, likely bleed-through from the reverse side of the page.]



Asalea procumbens - Trailing Azalea
Pentandra Monogyna

Gentle Cor. bell-shaped - Stamens regu-
 lar inserted into the recep.^e Caps super
 & celled

Spec. th. Branches spreading & procum-
 bent leaves opposite revolute very
 smooth

The heathy summits of all the high-
 land mountains of Scotland are clothed
 with a profusion of this elegant little
 shrub. The roots are woody branched
 & creeping running deep into the black
 moor soil in the fissures of the rocks
 stems also much branched procumbent,
 buried in moss intricate & tufted to their
 root occasionally at their base clothed
 with numerous opposite small elliptical
 entire revolute leaves very smooth shining
 & evergreen standing on short broad foot-

stalks & marked above with a longitudinal fur-
row beneath by a proscutic nerve. The
footstalks are often fringed flower stalks
forming a sort of terminal umbel each
having a concave bractea at its base & bearing
1 flower - Cal. purplish smooth regularly 5
cleft - Cor. rose colored regular bell shaped with
a spreading 5 cleft border - Stamens equal
& regular shorter than the Cor. Anthers vi-
olet style short straight stigma capitate -
Caps. of 5 valves whose inflex margins divide
into 5 cells containing many seeds -

The flowers appear early in July and be-
lieve they are inodorous - The Caps ripen
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CONVOLVULUS arvensis.

Small Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. Cor. bell-shaped, plaited. Stigmas 2.
Capsule with 2 cells, and 2 seeds in each.

SPEC. CHAR. Leaves arrow-shaped, the lobes acute.
Flowers generally solitary. Bractææ minute, remote from the flower.

SYN. Convolvulus arvensis. Linn. Sp. Pl. 218. Hudf.
Fl. An. 88. With. Bot. Arr. 212. Relb. Cant.
86. Sibth. Ox. 76. Curt. Lond. Fasc. 2. t. 13.
C. minor vulgaris. Raii Syn. 275.

BUT too common for the farmer and gardener in fields and all kinds of cultivated land, especially in a gravelly soil, flowering copiously from May to the end of July.

The root is perennial, running so very deep into the ground, and growing so fast, that it is next to impossible to destroy it. Stems very numerous, long, climbing and twining round every thing in their way, angular, slightly downy, not much branched except at the very bottom, clothed with alternate arrow-shaped leaves on downy footstalks; the leaves are very various in breadth, entire, except one tooth sometimes near the base, and a little downy. Stipulæ none. Flowers from the bosom of each leaf, solitary, on long (generally undivided) angular stalks swelling upwards, with a pair of minute bractææ about their middle, which are downy, narrow, rather lanceolate than subulate, and sometimes even obovate. Flowers very beautiful, rose-coloured, varying with lighter or deeper shades and lines of crimson, the plaits yellowish. They generally close before rain; in dry warm weather they have a very sweet almond-like smell. Calyx with a membranous edge, the leaves obtuse, lying over each other. Antheræ red or white. Style not very long; stigmas nearly equal to it in length, linear, distant. The seeds happily are rarely perfected.

There is a singular variety mentioned by Ray, with a smaller flower, deeply divided into 5 segments, and of a darker red than the common kind. Dr. Smith has observed this in a hedge out of St. Giles's gates, Norwich.

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CONVOLVULUS Soldanella.

Sea Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. Cor. bell-shaped, plaited. Stigmas 2.

Capful with 2 cells, and 2 feeds in each.

SPEC. CHAR. Leaves kidney-shaped. Flower-stalks

single-flowered, with membranous angles.

SYN. Convolvulus Soldanella. Linn. Sp. Pl. 226.

Huds. Fl. An. 89. With. Bot. Arr. 214.

C. maritimus, Soldanella dictus. Raii Syn. 276.

A NATIVE of our sandy sea shores, as at Yarmouth, Lowestoft, &c. The Rev. Mr. Baker and A. B. Lambert, Esq. sent it from Weymouth. The beautiful flowers may be found in July, not much later; they expand only in fine weather and in the early part of the day.

Root long, creeping, perennial. Stems procumbent, spreading in a circular form, 5 or 6 inches long, but little branched, angular, purplish. Leaves on longish foot-stalks, small, dark-green, heart or kidney-shaped, entire, sometimes a little angular. The whole herb is smooth and succulent. Flowers few and large, axillary, solitary, on long flower-stalks thickened upwards, and with 3 or 4 dilated membranous angles. Bractææ large, ovate, close to the flower. Calyx-leaves large, ovate. Corolla with five acute angles, rose-coloured, the plaits yellowish. Antheræ yellow. Stigmas small and sharp. Capful four-lobed.

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CONVOLVULUS sepium.

*Great Bind-weed.**PENTANDRIA Monogynia.*

GEN. CHAR. *Cor.* bell-shaped, plaited. *Stigmas* 2.
Capsule with 2 cells, and 2 seeds in each.

SPEC. CHAR. Leaves arrow-shaped, the posterior lobes lopped. Flower-stalks square, single-flowered. Bractææ heart-shaped, close to the flower.

SYN. *Convolvulus sepium.* *Linn. Sp. Pl.* 218. *Huds. Fl. An.* 88. *With. Bot. Arr.* 213. *Relb. Cant.* 87. *Sibth. Ox.* 76. *Curt. Lond. fasc.* 1. *t.* 13.
C. major. *Raii Syn.* 275.

THIS, one of the most elegant and graceful of all our wild flowers, is equally common with the preceding species, though its place of growth be different. It inhabits moist hedges, twining about willows and reeds, and decorating them with its very conspicuous flowers throughout July and August.

The roots are long, creeping, and perennial, a little fleshy. Stems very long, twining, somewhat angular, smooth, not much branched. Leaves alternate, on smooth footstalks about half their own length, dependent, smooth, of a swelling arrow-shape, with the angles at the base abruptly cut off. Stipulæ none. Flowers solitary, on axillary, undivided, square, curved stalks, with a pair of heartshaped, red-bordered bractææ, close to the flower and enfolding the proper calyx, which is smaller, of 5 lanceolate leaves. Corolla generally white, but sometimes (as Dillenius observes in Ray's Synopsis) of an uniform flesh or rose-colour. Antheræ cream-coloured. Stigmas short and thick. Seeds scarcely ever perfected.

An extract of the herb is said to be a violent purge, like Scammony.

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POLEMONIUM cæruleum.

Jacob's Ladder.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* in five segments. *Stamina* standing on five valves which close the tube. *Stigma* three-cleft. *Capsule* three-celled, superior.

SPEC. CHAR. Leaves pinnated. Flowers erect. Calyx longer than the tube of the corolla.

SYN. *Polemonium cæruleum.* *Linn. Sp. Pl.* 230.
Huds. Fl. An. 89. *With. Bot. Arr.* 215.

P. vulgare cæruleum. *Raii Syn.* 288.

THIS, although very common in gardens, is one of the plants most rarely found wild in this country. Botanists of the last century gathered it in the romantic and mountainous country about Malham Cove, in the north of Yorkshire, where it still grows, as well as in some parts of Derbyshire (*Withering*).

A variety with white flowers is very common, sometimes even from the same root as the blue ones (*Linnaeus*); the faint purplish blue seen in the flowers of this plant, being that which of all colours is most apt to vary to white.

Its stems rise to the height of eighteen or twenty inches, seldom more. The root is fibrous and perennial.

This plant is absurdly enough reckoned among the Valerians by the old authors, with which it has not the least affinity either in appearance, botanical characters, sensible qualities, or medical virtues.

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[Faint handwritten text visible on the right edge of the page, likely from the adjacent page.]

Lasiona Montana - Sheep Scabious

Penlandria monogynia

Leath Cor. wheel shaped deeply divided
into 5 linear segments. Stigma club
shaped notched - Anthers united at
the base - Caps. impr. imperfectly 2 cel-
led. bursting at the top.

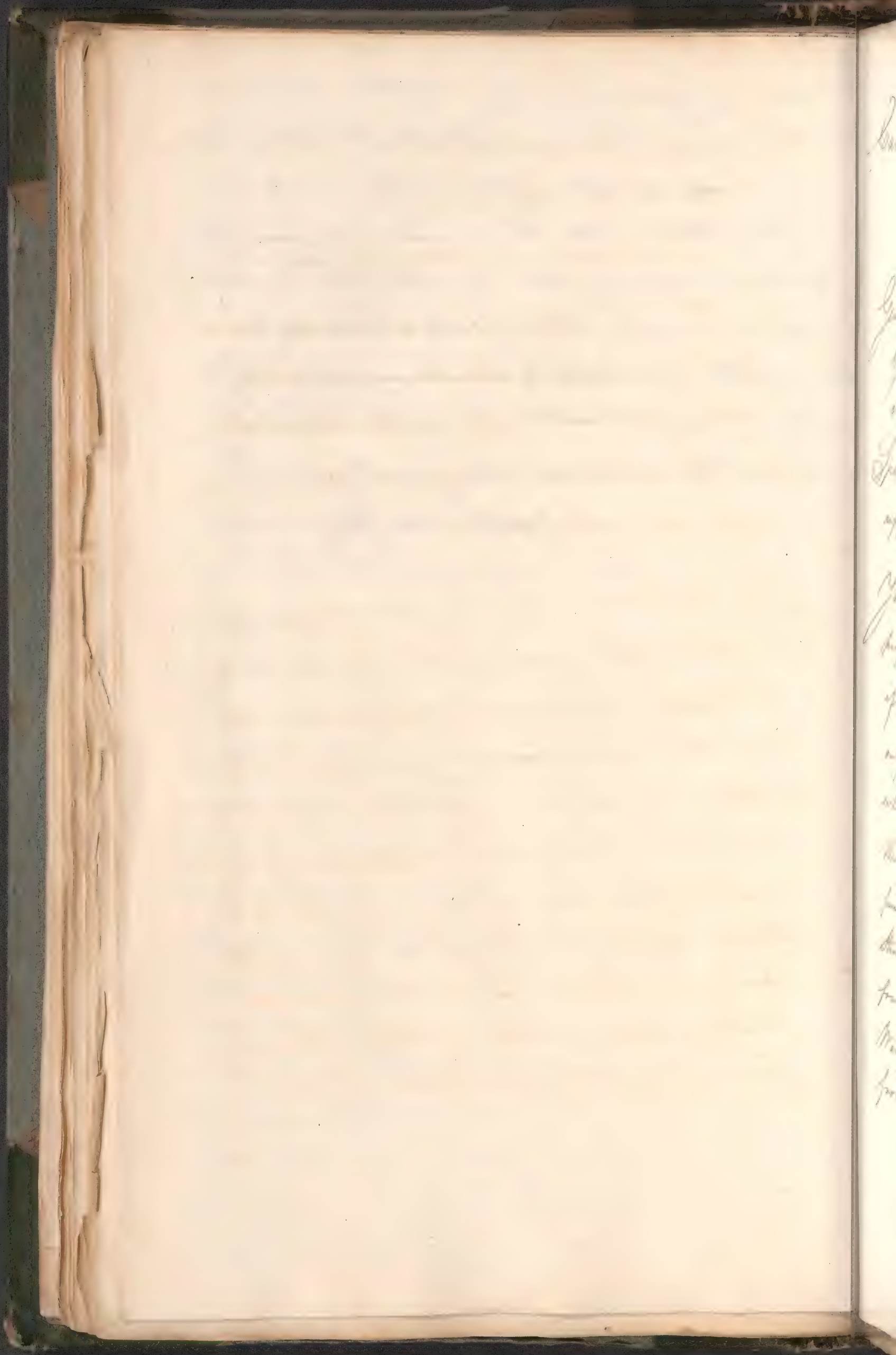
Spec. Ch. - - - - -

The pretty blue flowers of the Sheep L are
conspicuous in dry sandy fields & pastures
in the middle of summer & in autumn
the bladder like caps. remain sometime
after the seeds are scattered - It has obtained
the name of Scabious from its resemblance
to the genus properly so called a resemblance
merely external for the *Lasiona* is more akin
to *Lakelia Campanula* & *Oxytruma* in gra-
dual & botanical characters being indeed
distinguished from the latter only by the cohe-
sion of its anthers & by the fruit being but
imperfectly 2 celled. the partitions not rea-
ching to the central column as in all others
of this natural Order -

The Root is tapering a little woody the

annual - Stems several spreading, covered
by a fine high-huffy roundish rough branch
ed above. Leaves oblong blunt, serrated en-
tire rough those on the stem alternate
Flowers blue forming hemispherical heads,
each of which stands on a permanent common
Calyx of many leaves - but every flower has
its proper stalk & a 5 toothed super. calyx
Central flowers often abortive Stigmata
more or less club shaped

Campanula 21



Campanula rotundifolia - Round leaf
Bell Flower

Pentandria monogynia

Gentle Cor bell shaped closed at the Bottom
by Valves bearing the Stamina - Stigma 3
septs. Caps. infer. opening by lateral pores

Spec Ch Radical leaves Kidney shape
upper ones linear

Young Botanists are not unfrequently
deceived by the name of this Campanula
if they find it as is not unfrequent with
only the linear leaves remaining & indeed
when it grows on a rich soil among bushes
the round leaves soon disappear & a pro-
fusion of long narrow ones only cloath the
Stems It is one of our prettiest wild flowers
found every where on the moulder-
ing Walls & bushy borders of Parks flowering
from July to the End of the Season



CAMPANULA patula.

*Spreading Bell-flower.**PENTANDRIA Monogynia.*

GEN. CHAR. *Corolla* bell-shaped, closed at the bottom by valves bearing the *stamina*. *Stigma* three-cleft. *Capsule* inferior, opening by lateral pores.

SPEC. CHAR. Leaves straight; the radical ones nearly oval. Panicle spreading. Calyx denticulated.

SYN. *Campanula patula*. *Linn. Sp. Pl.* 232. *Huds. Fl. An.* 95. *With. Bot. Arr.* 216.

ONE of the rarest English plants, gathered at Cobham in Surry, in the park of the late Lord Ligonier, by Dr. Smith. Mr. Woodward found it in the borders of Buddon wood, Leicestershire; not in the wood itself, as has been commonly reported.

The root is biennial, slender, and white. Radical leaves growing many together, spreading, small, roundish, or oval, soon turning yellowish; those on the stem lanceolate, straight, and even; not undulated, as in *Campanula Rapunculus*. The panicle is also much more spreading than in that species, and the blossoms fewer. The flowers appear in July; and as the herb, though milky and bitter, is frequently eaten down by cattle, side branches spring up, and flower till the winter frosts destroy the root. The corolla is of an elegant form, tapering at the base, but spreading in the rim. This species has no kind of affinity with the common *C. rotundifolia*; some of whose varieties, when their radical leaves are lost, have been occasionally mistaken for it. It escaped the notice of Ray, but is admirably figured by Dillenius in his *Hortus Elthamensis*, tab. lviii. f. 68.



1705 *Thell. ch. ed. by J. P. S. L.*

CAMPANULA Rapunculus.

*Rampion Bell-flower.**PENTANDRIA Monogynia.*

GEN. CHAR. *Cor.* bell-shaped, closed at the bottom by valves bearing the stamina. *Stigma* 3-cleft. *Capsule* inferior, opening by lateral pores.

SPEC. CHAR. Leaves undulated; the radical ones lanceolate inclining to oval. Panicle compact.

SYN. *Campanula Rapunculus.* *Linn. Sp. Pl.* 232. *Huds. Fl. An.* 95. *With. Bot. Arr.* 217.

Rapunculus esculentus. *Raii Syn.* 277.

ANATIVE of banks and borders of fields in some parts of England, more particularly Surrey and Kent. It is an old kitchen-garden vegetable, the root having been formerly eaten either raw in fallads or boiled. When recent it is the size and shape of a radish, but white, milky, sweetish with some pungency and bitterness. It is now out of use.

Root biennial. Stem erect, angular, rough (especially on the angles) with deflexed white hairs, the upper part being less rough, paniced and sometimes branched. Leaves roughish, undulated and toothed; the lowest somewhat elliptical, the others lanceolate; the floral leaves very narrow. Panicle compact, upright, its side branches bearing from one to three or more flowers. Germen in our specimens smooth, in those of Linnæus hairy, the hairs often inflated and becoming globular; teeth of the calyx very long and taper, generally entire, but sometimes bearing one small tooth on each side near the base, though they are by no means so denticulated as in *C. patula* (tab. 42), neither is the corolla taper at the base, as in that species, but inflated. The flowers appear in July and August.



CAMPANULA Trachelium.

Nettle-leaved Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-shaped, closed at the bottom by valves bearing the stamina. *Stigma* three-cleft. *Capsule* inferior, opening by lateral pores.

SPEC. CHAR. Stem angular. Leaves on foot-stalks. Calyx fringed. Flower-stalks three-cleft.

SYN. Campanula Trachelium. *Linn. Sp. Pl.* 235. *Huds. Fl. An.* 96. *With. Bot. Arr.* 218. *Relb. Cantab.* 94.

Campanula vulgarior foliis Urticæ, vel major et asperior. *Raii Syn.* 276.

FOUND in woods and hedges in a gravelly soil in various parts of Great Britain. The root is perennial; and the flowers, which are occasionally found white, appear in the middle of summer. The stem is from two to three feet high, and the harsh rough leaves look very like those of a nettle.

Of all our British species of Campanula, except the *rotundifolia*, this is the most common: the rest may be reckoned among the rarer plants.

Fig. 1. Represents a stamen on its valve, separate.

— 2. Seed-vessel.



Fig. 1. 1796 *Campanula medium* L.

CAMPANULA latifolia.

*Giant Bell-flower.**PENTANDRIA Monogynia.*

GEN. CHAR. *Cor.* bell-shaped, closed at the bottom by valves bearing the stamina. *Stigma* 3-cleft. *Caps.* inferior, opening by lateral pores.

SPEC. CHAR. Leaves ovato-lanceolate. Stem unbranched, round. Flowers solitary, pedunculated. Fruit drooping.

SYN. *Campanula latifolia.* *Linn. Sp. Pl.* 233. *Huds. Fl. An.* 96. *With. Bot. Arr.* 218. *Relb. Cant. Suppl.* 2. 10. *Lightf. Scot.* 141.

C. maxima foliis latissimis. *Raii Syn.* 276.

IN the north of England, and in Scotland according to Mr. Lightfoot, this species of *Campanula* is not unfrequent, though rare in the southern counties. It grows in shady moist places, about the bases of mountains. Mr. Rose observed it in Forehoe wood near Kimberley, Norfolk. Our wild specimen grew near Dunstable, where it was first remarked and ascertained by our obliging correspondent the Rev. Mr. Abbot, for many botanists overlook this plant for *C. Trachelium*.

Root perennial, very milky as well as the whole herb. Stem 3 or 4 feet high, erect, simple, cylindrical or very slightly angular, leafy. Leaves alternate, nearly sessile, large, roughish, paler beneath, doubly serrated. From the bosoms of the upper ones arise solitary naked flower-stalks, scarcely ever bearing more than one flower; we have not found the pair of "leaf-scales," or rather bractæ mentioned in the Bot. Arr. Calyx smooth, serrated. Corolla large and handsome. The antheræ are not large, but afford plenty of pollen, which copiously adheres to the style.

This is sometimes cultivated in gardens. It flowers in August, and is rather ornamental; occasionally varying to white or pale rose-colour.



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CAMPANULA glomerata.

Clustered Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-shaped, closed at the bottom by valves bearing the stamina. *Stigma* three-cleft. *Capsule* inferior, opening by lateral pores.

SPEC. CHAR. Stem angular, simple. Flowers sessile, most of them in a terminal cluster. Leaves ovate.

SYN. *Campanula glomerata.* *Linn. Sp. Pl.* 235. *Huds. Fl. An.* 96. *With. Bot. Arr.* 219. *Relb. Cant.* 94.

C. pratensis, flore conglomerato. *Raii Syn.* 277.

A NATIVE of dry chalky pastures, as Gogmagog hills, Newmarket heath, the neighbourhood of Marham in Norfolk, Bury in Suffolk, and various parts of Yorkshire, Surrey, and other chalk countries, which its conspicuous flowers adorn very copiously in the months of July and August.

The stem is never (we believe) branched, unless it happens to have been eaten off by cattle when young; it is erect, angular, hairy, from six to eighteen inches high. Leaves rough, pale but not hoary, beneath; the calyx, and even corolla, are sometimes hairy, and the latter occasionally varies from purple to white. Root perennial, with long fibres.

This plant is no contemptible ornament for rock-work, or flower-borders in dry ground, where little else will grow. A moist or rich soil makes the herb too luxuriant, the flowers pale and degenerate, taking away its alpine habit.



... R. L. ... J. S. ...

CAMPANULA hybrida.

*Corn Bell-flower.**PENTANDRIA Monogynia.*

GEN. CHAR. *Cor.* bell-shaped, closed at the bottom by valves bearing the stamina. *Stigma* 3-cleft. *Capsule* inferior, opening by lateral pores.

SPEC. CHAR. Stem often branched from the base. Leaves oblong, crenate and undulated. Corolla rotate, shorter than the calyx. Capsule prismatic.

SYN. *Campanula hybrida.* *Linn. Sp. Pl.* 239. *Huds. Fl. An.* 97. *With. Bot. Arr.* 219. *Relb. Cant.* 95. *Sibth. Ox.* 81.

C. arvensis erecta, vel *Speculum Veneris minus.* *Raii Syn.* 278.

SENT by the Rev. Mr. Hemsted from Cambridgeshire. It is found also in Norfolk and Suffolk, in corn-fields on a chalky soil, but by no means frequently, flowering towards autumn.

Root small, fibrous and annual. Stem nearly erect, with a tendency to branch more or less at the base as well as in the upper part, very various in luxuriance, a little zigzag, angular, roughish, leafy. Leaves alternate, undulated, sparingly crenate, rough, especially on the margin. Flowers terminal, solitary, sessile among a few leaves. Germen prismatic, long, roughish. Calyx-leaves about half as long as the germen, lanceolate, revolute, hairy. Corolla very small, rotate, half as long as the calyx-leaves, seldom fully expanded, pale purple. Style and stigma club-shaped, hairy.

Such is the description of our plant, which will not be found to accord exactly with what Linnæus has said. His remarks however agree with his original specimen now before us, which is apparently a cultivated one, with very long linear calyx-leaves, and a very small corolla. The stem too is upright and smooth. From the consideration of many wild as well as cultivated specimens of *C. Speculum* and *hybrida*, we are persuaded they are varieties of each other, and that the calyx-leaves in both are very variable in length and breadth, as well as the corolla in size.



CAMPANULA hederacea.

Ivy-leaved Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. Cor. bell-shaped, closed at the bottom by valves bearing the stamina. Stigma three-cleft. Capsule inferior, opening by lateral pores.

SPEC. CHAR. Leaves heart-shaped, five-lobed, on footstalks, smooth. Stem flaccid.

SYN. Campanula hederacea. Linn. Sp. Pl. 240. Huds. Fl. An. 97. With. Bot. Arr. 220. Dicks. Dried Plants, 56.

C. Cymbalariae foliis. Raii Syn. 277.

FEW plants exceed this Campanula in elegance, and yet it has never had the fortune to be well figured. The old authors represent its corolla very erroneously, and Flo. Dan. t. 330, is one of the worst figures in every respect that can be. Our specimens were collected on a bog near High-beech, Epping Forest, by Mr. Edward Forster, junior. This species was never before found so near London, though not rare in moist woods in the midland and southern counties, and very plentiful in Cornwall, from whence Francis Borone brought it to Mr. Dickson for his Fasciculi of Dried Plants. Though a bog plant, it is capable of cultivation, and is almost naturalized under a magnificent shrubbery of Kalmias in Kew garden. It flowers throughout the summer.

Its roots are perennial, fibrous, and slender, sprouting from various parts of the procumbent stems, which are matted together, and spread very far. The whole herb is pale, tender, and delicate, smooth, except a very few scattered hairs occasionally found on some of the leaves. Flowers solitary, on long terminal footstalks, a little drooping, fugacious, and soon withering after they are gathered. Segments of the calyx pointed and entire.

Linnaeus's suspicion of this being a hybrid plant (Am. Acad. v. 3. 55) is unwarrantable. He supposes it may have been produced from some Campanula impregnated by Veronica hederifolia, and gives for reason that its leaves are quite foreign to those of others of its genus; yet surely they much more resemble the radical leaves of C. rotundifolia than those of this Veronica.



PHYTEUMA orbicularis.

Round-beaded Rampion.

PENTANDRIA Monogynia.

GEN. CHAR. Cor. wheel-shaped, in five linear segments. Stigma three-cleft. Capsule three-celled.

SPEC. CHAR. Flowers in a roundish head. Leaves serrated; the radical ones heart-shaped.

SYN. Phyteuma orbicularis. Linn. Sp. Pl. 242.

Huds. Fl. An. 97. With. Bot. Arr. 220.

Rapunculus corniculatus montanus. Raii Syn. 278.

WE are obliged to Thomas Cornwall, Esq. of Chast Park Surrey for this specimen, gathered wild in that county, in several parts of which, as well as in Suffex and Hampshire, this rare plant is found abundantly on a chalky soil, and flowers about July or August. It is one of our more elegant and singularly constructed productions, and may be cultivated without trouble in a dry gravelly or calcareous situation, though we must own the rich blue of its flower-buds is most conspicuous in a wild state.

The long woody root branches near the surface of the ground into several divisions, each bearing a dense tuft of petiolated, smooth, veiny, serrated, or rather crenated, leaves, the first of which are heart-shaped, the rest ovato-lanceolate, and from the centre of which arises a simple erect stem, slightly angular, and clothed with alternate lanceolate leaves, the uppermost of them very acute, and somewhat recurved. A single round head of flowers stands erect on a few ovate, acute, ciliated bractæ. The parts of fructification agree in structure with the genus of Campanula, except that the corolla is divided to the very base, into five linear spreading segments, which in the bud cohere together, forming a curved horn, and separating first at their lower part. Every part of the flower remains permanent, though faded, till the seeds are dispersed, or longer. The herb is milky, but not acrid.

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Lonicera 23





Juncus Valerandi Brook Weed or
Water Pimpernel

Pentandria Monogynia

Genet. Cor. salver shaped 5 cleft with
intermediate scales - Stam. inserted
into the Tube opposite to the segments
Caps. half inferior of 1 cell with 5 teeth
Spec. Ch. leaves blunt Cluster many
flowered a small Bractea on each
flower stalk

The Water Pimpernel is found as Linnaeus
mentions almost in every quarter of the
Globe & in very differ. latitudes - it is not
very common in England or Scotland it
occurs chiefly in clear watery boggy places
upon a gravelly soil flowering in
July & is perennial - Root of many
simple fibres - whole herb smooth pale
green a little succulent about a foot high
Stem round terminating in one or more
long clusters of numerous white flowers
each on its own flower stalk in the
middle of which stands a small bractea

The leaves are alternate obovate & entire
Stamina included within the Corolla
which is a little longer than the Calyx
& small scales between the lobes of the Co-
rolla form the essential Character of the
Genus - The Caps is rather more below
than above the Cal & opens with 5 small
teeth at the top



Lobelia urens - *Arid Lobelia*

Pentandrium Monogynum

Fls. Cor irregular slit longitudinally on its upper side. Stigma capitate. Anther-ell united into a tube. Caps. infr with 2 or 3 cells.

Sp. Ch. Stem upright. Lower leaves obovate upper ones lanceolate all toothed. Flowers racemose downy.

A very rare Plant never yet found out of Dawson's. It is perennial growing on rocks among small shrubs & flowering about Sept. Root creeping fibrous increasing by offsets. Stem about a foot high branched leafy angular roughish but not hairy. Leaves all irregularly toothed rather than serrate alternate the lowest obovate. Flowers in very long terminal simple bracteated spikes or clusters. Cal of 5 linear rough spreading leaves, crowning the furrowed roughish Gynem. Cor of a full purplish blue rough

with minute point, Stamens protruding
tho' the sepals of the Cor. Their filaments,
in the upper part as well as the Anthers in-
serted into a tube. Stigma deflexed its head
down. It when in perfection gaping fringed
beneath with short hairs. Caps. 2 called
seeds numerous small. Herb milky
scented & very acrid -



Fig. 1. 2. 3.

LOBELIA Dortmanna.
Water Lobelia.

SYNGENESIA Monogamia.

GEN. CHAR. *Cal.* 5-cleft. *Cor.* of one petal, irregular.
Capsule inferior, with 2 or 3 cells.

SPEC. CHAR. Leaves linear, 2-celled, entire. Stem almost naked.

SYN. *Lobelia Dortmanna.* *Linn. Sp. Pl.* 1318. *Huds. Fl. An.* 377. *With. Bot. Arr.* 950. *Lightf. Fl. Scot.* 505, t. 21.

Gladiolus lacustris. *Ger. em.* 105. *Dortmanni. Raii Syn.* *287.

THE beautiful lakes of Westmoreland and Cumberland abound with this elegant and singular plant. Their gravelly bottoms are generally covered with thick tufts of its leaves, the flowering part of the stem being all that rises above the water; so that in sudden floods it is sometimes entirely overflowed, not having, like some vegetables, the means of accommodating itself to such quick changes, either by a more or less inclined position, or a spiral structure. Dr. Woodville favoured us with this recent specimen from Kewick Lake. The plant grows also in Wales and Scotland, flowering in July.

Root of long simple whitish fibres, perennial. Leaves almost wholly radical, linear, entire, and very blunt, recurved, smooth, chiefly remarkable for their internal structure, as they consist of two longitudinal hollow cells with a partition between. Stem erect, simple, varying in length according to the depth of the water wherein it grows, round, smooth, hollow, terminated by a simple upright loose spike or racemus of elegant pale purplish drooping flowers, standing on short footstalks with a small blunt bractea at the base of each. The segments of the corolla are slightly bearded at their base, as are the antheræ at their tip. The stigma too is ciliated. The germen in ripening becomes erect; an example, among innumerable others, shewing it is not the weight of drooping flowers that makes them take an inclined position; the fruit of such, though much the heavier, being almost always upright, for the seeds are thus more surely retained till ripe, and then more extensively scattered; whereas by the inclined corolla, or rather, in this genus, by the incurved figure of the antheræ themselves, the pollen is sheltered from wet.—This herb abounds with milky juice.

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Lonicera Periclymenum - Common

Honeysuckle or Woodbine

Pentandria Monogynia

Gentle - as before

Spec Ch Heads of Flowers ovate imbricate
terminal - leaves all separate ringent

Deciduous - flowers ringent

This elegant Plant which decorates
our hedges so abundantly & whose flowers
perfume the air so delightfully in an Evening
or after Rain differs essentially from the last
in having all the leaves distinct - the flowers
collected into an ovate head not axillary
& the fruit crowned with a 5 toothed Calyx
instead of the nearly entire Rim of the other
the Berries are also rounder of a darker red
& often roughish. The trailing Stem climbs
to a considerable height upon Trees & bushes
the leaves are entire for the most part & of a
generally of a full green & smooth pale

remark after having & in that case they are
all over of a lighter hue — There sometimes
occurs a remarkable variety with some
and generally variegated leaves called the
Oak leaved H.

The common H. is liable to many
variations in the different degrees of hawking
of its leaves from & younger branches — as
well as in the color of its flowers which
are either externally of a deep red or altogether
of a pale yellowish hue — by the sea side
they are often quite green — They all flower
most plentifully in June & July — but occa-
sionally throughout the autumn also



Lonicera Caprifolium - Pale perfoliate
Honeysuckle

Pentandria Monogynia

Gentle Cor. of 1 Petal irregular

Berry infr. of 2 cells. with several seeds.

Spec. Ch. Flowers ringent. whorled
terminal leaves deciduous the upper
united & perfoliate

The first information of this as a native of Britain was communicated by the Rev. J. Butts. who found it plentifully in a Wood near Islip Oxfordshire - I hesitated to admit a Plant so common in Gardens - but Mr. Relhan having discovered it in Cambridgehire in his opinion certainly right I could no longer refuse it a place - It has probably been overlooked as one of the many varieties of the common H. from all which however it is perfectly distinct & easily to be known by the perfoliate upper leaves

It flowers in May or June — the
woody twisting stem climbs upon Bushes
or Trees & is clothed with opposite entire
smooth leaves glaucous beneath all which
are in some degree connate by their foot-
stalks but one or two of the uppermost pairs
are perfectly united & perfoliate — The flowers
grow in Whorls axillary in the bosom of their
upper leaves — & are fragrant yellowish with
a blunt corolla tube. Their structure is regular
one segment of the border being much deeper
than the rest & greatly invaginated. Berries
elliptical orange red crowned with the almost
entire calyx —



Lonicera Dylostium - Upright Honeysuckle

Pentlandria Monogyna

Fls. Cor. of 1 petal irregular Berry
infr with several seeds -

Spec. Cl. - Stalks 2 flowers. Berries
distinct - leaves entire downy

Stem upright bushy very much branched
Branches opposite round those of the present
Year downy & leafy - leaves opposite on
footstalks ovate rather pointed entire
flexible clothed on both sides with short
soft hairs deciduous - Flowers inodorous
in pairs on solitary axillary stalks shorter
than the leaves - Outer Bractea a pair of
awl shaped hairy spreading leaves - inner
a concave blunt hairy scale under each
germen - Cal. in 5 obtuse lobes. Cor. yellow
ish white often tinged with red downy.
upper lip 4 cleft lower undivided - Stam-
ina equal downy, shorter than the Cor. Berries
oval red & separate of 1 cell juicy with 6 or more seeds
flowers in July



May 1st 1797 Published by J. G. Smith, London

VERBASCUM Blattaria.

*Moth Mullein.**PENTANDRIA Monogynia.*

GEN. CHAR. *Cor.* wheel-shaped, a little irregular.
Capsf. with one cell, and two valves.

SPEC. CHAR. Leaves embracing the stem, oblong,
 smooth, serrated. Flower-stalks single-flowered,
 solitary.

SYN. *Verbascum Blattaria.* *Linn. Sp. Pl.* 254. *Huds.*
Fl. An. 91. *With. Bot. Arr.* 229.

Blattaria lutea. *Raii Syn.* 288.

FOUND by Mr. Jacob Rayer on a bank about 3 miles from Rochester, near the river Medway, in which neighbourhood it is mentioned as growing in Ray's time. We are enabled by means of this wild specimen to remove Dr. Stokes's doubt in the *Bot. Arr.* whether the true *V. Blattaria* be an English plant or not. In gardens it is frequently cultivated, and very ornamental, flowering from July to November, or even later, if the weather be mild.

Root annual, fusiform. Stem 3 or 4 feet high, branched, leafy. Radical leaves slightly pinnatifid; stem-leaves ovate, or oblong, pointed, embracing the stem; all smooth, veiny, unequally or doubly serrated. The upper ones gradually diminish into pointed *bractææ*, from each of whose bosoms arises a solitary simple slender flower-stalk, bearing one handsome yellow flower, streaked more or less with purple. The calyx is in 5 nearly equal segments. Stamina clothed with purple hairs. Germen globose. Capsule rather oblong. The upper part of the stem, as well as the germen, calyx, *bractææ* and upper leaves, are clothed with short hairs tipped with a minute globe.

We have been favoured by the Hon. Mrs. F. Howard with a specimen gathered in Norfolk, near Lynn, which is either a variety of this plant with a large purplish flower, or the *V. phæniceum* of Linnæus; we have not yet been able to determine which.



VERBASCUM nigrum.

Dark Mullein.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* wheel-shaped, a little irregular.

Capsule with one cell, and two valves.

SPEC. CHAR. Leaves oblong-heart-shaped, on footstalks.

SYN. *Verbascum nigrum*. *Linn. Sp. Pl.* 253. *Huds. Fl.*

An. 90. *With. Bot. Arr.* 226. *Relb. Cant.* 88.

V. nigrum flore parvo, apicibus purpureis. *Raii Syn.*

288.

BY what figure of speech this beautiful plant can be called *black*, not having a particle of that colour about it, we will not determine. All the old botanists, however, have so denominated it; and if they had any meaning, it can only have been that it was *not white*.

Its dark-green leaves are sometimes hoary beneath, especially the upper ones. The racemus of flowers is longer and more simple than in most of the other species. Nothing can be more elegant than the purple stamina contrasted with the yellow corolla.

This species loves a gravelly soil, and is not rare in Norfolk and Suffolk. It is very conspicuous at a distance under hedges in green shady lanes, to which it is a great ornament. The flowers appear about Midsummer, and last till September. The root is perennial.



Verbascum puberulentum - Yellow
Hoary Mullein

Pentandria monogynia

gen. Ch. Cor. wheel shaped a little irregular. Caps. with 2 cells & 2 valves

Spec. Ch. Leaves oblong-ovate slightly serrated, mealy on both sides. Stem round panicle

Gathered by Mr J Wapstall at Norwich about which Town as well as Bury & some other parts of Norfolk & Suffolk this beautiful plant grows plentifully in waste ground hedges & the borders of Fields. It is biennial flowering in July at which time if not previously broken or damaged it forms a golden Pyramid a yard high of many hundred flowers & is one of the most magnificent of British herbaceous Plants

The leaves are often above a foot long & of a somewhat elliptical pointed form those on the stem more ovate & sessile all of them slightly serrated & clothed on both sides with white mealy down - which easily rubs off & when seen in a microscope is found to consist of numerous stony entangled tufts. The stem is round not angular as in the true *N. hypochrysis* t 58. woolly as well as the cal. forming a pyramidal branched panicle. The flowers are clustered on its branches. Cor. large bright yellow Stamina scarlet bearded with pale or white hairs. In some places as Helderland near Norwich a Mule Plant is engendered between this & *N. nigrescens* having the habit of the former & flowers with purple Stamina like the latter.

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VERBASCUM Lychnitis.

White Mullein.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* wheel-shaped, a little irregular.

Capsule with one cell, and two valves.

SPEC. CHAR. Leaves oblong-wedge-shaped, nearly smooth on the upper side.

SYN. *Verbascum Lychnitis*. *Linn. Sp. Pl.* 253. *Huds.*

Fl. An. 90. *With. Bot. Arr.* 225 β.

V. flore albo parvo. *Raii Syn.* 287.

GATHERED in lanes about Dartford in Kent, flowering in June. It loves a chalky soil, and is most frequent in that county.

Our specimens agree precisely with that in the Herbarium of Linnaeus, which we learn, from certain marks and numbers, to be what he intended in the 1st edition of *Species Plantarum* for V. Lychnitis, though even in that work he seems to reckon our hoary yellow Mullein as the original species, making the white a variety.

This Mullein is remarkable for its straight, wand-like, angular stem; its leaves very white beneath, but green with a slight hoariness above; and its cream-coloured flowers, which are produced in great numbers in a compound, clustered, terminal racemus, one of the lateral branches of which is all our figure would admit.

The yellow hoary Mullein is surely a very distinct species, its leaves being, on both sides, covered with thick wool—not to mention other differences.



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Verbascum Thapsus — Great Mullein

Pentandria Monogynia

Gen. Ch. Cor. wheel shaped. a little irregular. Caps. sup^r with 2 cells & 2 valves
Stamina bearded

Spec. Ch. Leaves decurrent woolly on both sides — Stem simple

Frequent on banks, ledges or waste ground especially on a gravelly or calcareous soil. Flowering in July & August. — Root, biennial spindle shaped. Stem erect simple stiff & straight from 3 to 5 feet high leafy angular woolly underneath. Leaves alternate decurrent oblong nearly entire very thickly clothed on both sides with white branched intricate woolly hairs. Spike terminal erect cylindrical dense many flowered flowers sepals closely set bright yellow rarely white. Stamina yellow hairy. Anthera red. Stigma Club shaped — Mr Robson communicated to Dr Wetherby a Mule Plant produced under his own Eyes from this species impregnated by V. M.

indeed no Genus is more apt to engender
such than this —

A Pint of Cows Milk with a handful
of the leaves of this Mullein or *N. pulcherrima*
turn t 487. Boiled in it to $\frac{1}{2}$ a pint sweeten
with Sugar strained & taken at Bed time
is a pleasant emollient & nutritious Me-
dicine for allaying a Cough & more par-
ticularly for taking off the pain & irrita-
tion of the Piles — The whole Herb is
mucilaginous & a little Narcotic —

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Verbascum virgatum Large flowered
Mullein

Pentandria Monogynia

Gen. Ch. Cor. wheel shaped a little irregular. Caps. supr. with 2 cells & 2 valves. Stamina bearded

Spec. Ch. Leaves oblong lanceolate dentate sepals the radical one somewhat lyrate downy. Stem branched flowers clustered nearly sepals

The Root is thick branched - Whole plant much larger & stronger than *P. Blattaria* clothed generally all over & the lower leaves constantly with short prominent often forked glandular hairs. Stem 5 or 6 feet high branched from the bottom leafy round but somewhat angular or winged from the leaves running down it. Radical leaves resembling those of the Primrose but somewhat larger & more or less lyrate those on the stem oblong lanceolate doubly dentate sepals & in some degree embracing the stem. Flowers axillary clustered on short woolly stalks & some

of them sepals large yellow purple about
the Centre soon falling off segments of the
Cal. ovate larger & broader than in N. B.
Stamina yellow bearded in the middle
with purple

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Hypocyanus niger - Common Henbane

Penlandria Monogynia

Length Cor. funnel shaped obtuse in regular Stamens enclosed - Caps with a lid 2 celled

Spurth Leaves sinuated embracing the stem - flowers sessile

Henbane is not uncommon on waste ground about Villages & the sides of Roads in dry sunny places more especially on a calcareous soil flowering in July Root annual spindle shaped - stem bushy round leafy - leaves alternate sessile sharply sinuated - spikes terminal recurved leafy simple - flowers sessile erect calyx petaloid shaped with a regular 5 cleft border reticulated with veins prominent Cor straw colored more elegantly pencilled with a network of purple veins Anthers & style purplish Caps. clothed with the body of the calyx divided into 2 cells & closed with a convex

smooth the seeds numerous

The whole herb is soury viscid & extremely fetid tho a slight degree of its odour is to some people not unpleasant its qualities are highly & dangerously narcotic - but like many other poisons it may under skilful management prove a useful Medicine

The seeds & Capsules smoked together are in some places a popular Remedy for the tooth ache but Convulsions & temporary insanity sometimes follow its use - The seeds alone abraded with oil which counteracts their noxious properties may be safely eaten as I have often in my youth experienced - So the seeds of the Poppy may be eaten without any narcotic effect

Alouha 20





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Atropa Belladonna *D* *swale* or
Dreadly Nightshade

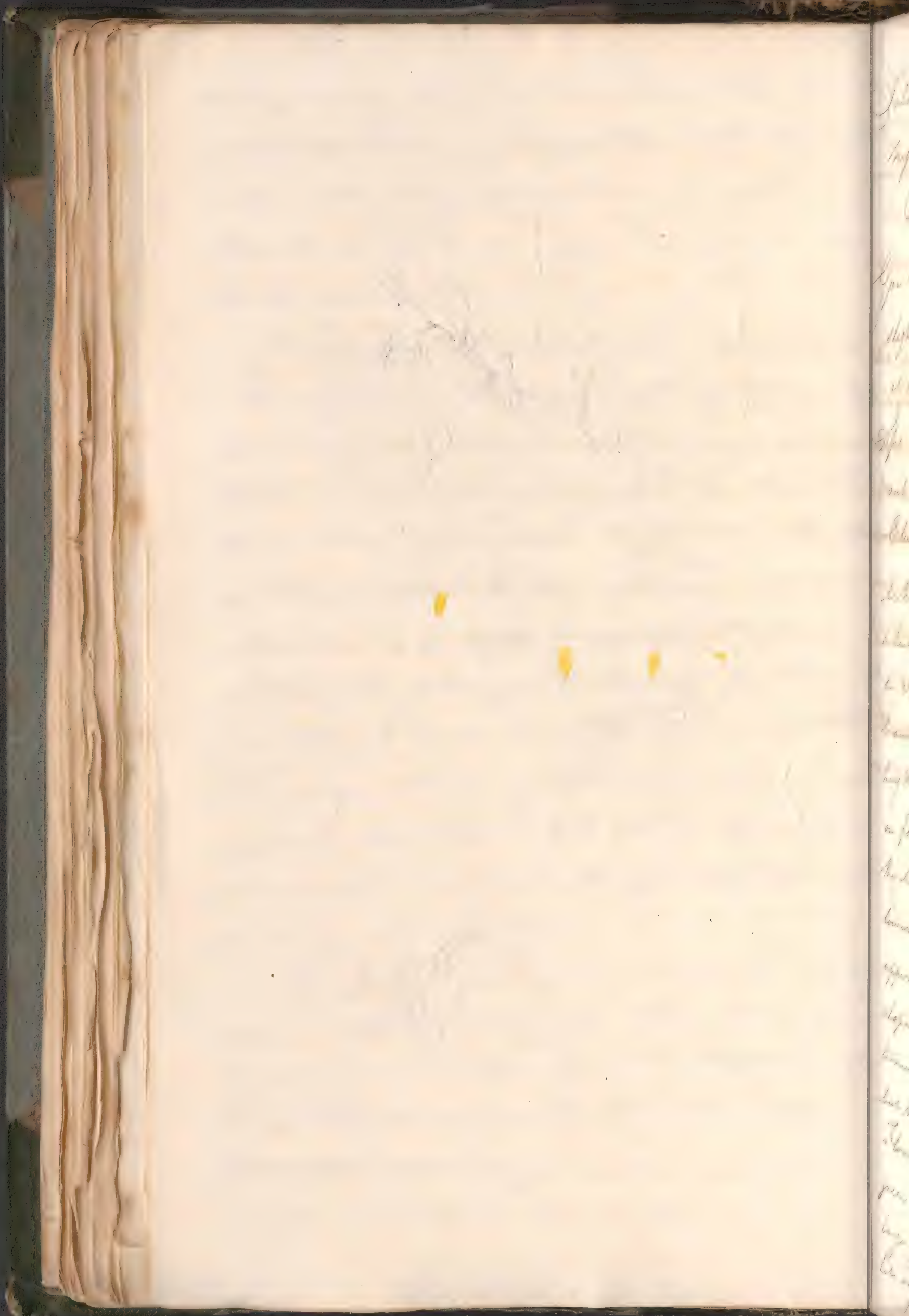
Penlandria Monogynia
 Genl. Cor. Bell shaped. Stamens
 distant. Ovary sup. of 2 cells
 Sp. Ch. Stem herbaceous leaves ovate
 undivided

In Hedges & waste ground more espe-
 cially in a calcareous soil but happily
 not very frequent at present it having
 by common consent been eradicated gene-
 rally it generally occurs about ruined
 castles & monasteries the flowers appear
 in June & the fruit ripens in August
 Root perennial creeping thick fleshy white
 bark - Stems annual erect about 3 feet
 high branched leafy round - leaves lateral
 in pairs one smaller than its companion
 ovate entire of a dull green - Flowers on
 solitary simple axillary flower stalks droop-
 ing Cor. of a dull purplish hue truly

expressive of the kind poisonous tribe to
which it belongs Berry about the size of
a small Cherry but flatter of a shining
black its Juice of a fine & lasting Violet
Seed numerous

This is perhaps the most dangerous
Bruit. Plant - Its fruit is tempting in ap-
pearance sweetish & without any re-
markable or repulsive flavour so that the
sinner has often eaten it & even half
a Berry is said to have proved fatal
it occasions a deep & deadly stupor
a Draught of Vinegar & keeping the Patient
walking to prevent sleep are said to be
the surest Means of Cure - As this Poison
is not corrosive & acts solely upon the
nerves it is not so beneficial & Emme-
do not take effect

The juice given internally in a
sore & applied externally have been re-
commended in Cancers but the sufferings of
the Patient under the smallest dose
 Dreadful



Solanum Dulcamara Moody
Nightshade or Bittersweet

Pentandria Monogynia

Ger. Ch. Cor. tubel shaped. Anthers
slightly coherent opening by 2 pores
at the top. Berry superior 2 celled
Spe. Ch. Stem shrubby azyg. with
out thorns. Upper leaves hastate
Clusters axillary

A native of Hedges & Shady Places
where the Soil is moist flowering
in June & July. The Moody
branched twisted stem climbs to the
height of several feet. Leaves alternate
on footstalks entire & smooth except on
the Sea Shores where they are hairy the
lowermost are heart shaped & undivided the
uppermost more or less completely halberd
shaped. Clusters opposite to the leaves or
terminal. Having the general appearance
but not the structure of a *Gymnosperm*
Flowers very elegant purple with 2
green dots at the base of each segment &
large yellow anthers. Berries oval scar
let very juicy bitter & poisonous

The young branches or the Root employed
in a decoction are much celebrated by
some Practitioners for removing various
obstructions promoting expectoration &
are useful in obstinate Coughs as well
as Rheumatic Disorders.

This Medicine is to be cautiously ad-
ministered in small doses & diluted with
Milk especially in the beginning it
being sometimes liable to produce No-
miting convulsions & delirium (Wood-
ward Saunders author of an elegant
introduction to Botany published in 1794
has in the course of an extensive Country
practice used the Dulcamara with
great Success & without the inconveni-
ence mentioned

Lobelia 37





Solanum nigrum Garden Nightshade

Pentandria monogyna

Gen. Ch. Cor. wheel shaped. Anthers
slightly connected. opening by 2 pores at
the top. Berry superior 2 celled

Spec. Ch. Stem herbaceous without
thorns leaves ovate bluntly toothed
& waved. Umbels lateral drooping

Common every where in cultivated
as well as waste ground especially
on aluphills throwing most in a rich
Soil & flowering from June to Sep.

Root annual much branched. Stem
branched leafy spreading angular
somewhat winged & often of a woody
hardness for in our mildest Winters
as in hot Climates it survives the Winter
leaves alternate on foot stalks ovate waved
lengthened out at the base somewhat downy
Umbels lateral from the interstices of the
stem between the leaves drooping downy
bearing a few white musky scented flow-
ers. Berries black globular - Hudson
mentions their being sometimes yellow

The whole herb is held narcotic cele-
brated for promoting perspiration &
urine but to be used with great caution
An infusion of from 1 to 3 fms of the
dried leaf is said to be amply suffi-
cient for a dose a larger quantity occa-
sioning violent sickness with head ach
giddiness & other dangerous symptoms
An ointment made of these leaves &
Hops seed was used by Solana de legua
a famous Spanish Physician about 2
Centuries since in the cure of Consump-
tion The Patient was to be buried for some
time up to the Chin in the Earth & after-
wards rubbed with this Ointment -



49



Sept. 1797. Delineat. by J. Sowerby. Linn.

CHIRONIA Centaurium.

*Common Centaury.**PENTANDRIA Monogynia.*

GEN. CHAR. *Corolla* salver-shaped. *Stamina* inserted into the tube. *Antheræ* becoming spiral. *Style* declining. *Seed-vessel* of two inflexed valves.

SPEC. CHAR. Stem herbaceous, dichotomously panicled. Leaves ovato-lanceolate. Calyx shorter than the tube.

SYN. *Chironia Centaurium*. *Curt. Lond. fasc. 4. t. 22.*
With. Bot. Arr. ed. 3. v. 2. 255. *Sibth. Ox. 75.*
Woodv. Med. Bot. t. 157.

Gentiana Centaurium. *Linn. Sp. Pl. 332.* *Huds. Fl.*
An. 102. *Relb. Cant. 100.* *Dicks. H. Sicc. fasc.*

7. 3.

Centaurium minus. *Raii Syn. 286.*

A FREQUENT inhabitant of dry gravelly or chalky pastures, scarcely to be cultivated in a manured soil, flowering in the latter part of summer; its blossoms close as soon as gathered, and against rain.

Root small, branching, annual. Stem solitary, erect, about a foot high, with 4 sharp edges, leafy, terminating in several opposite, forked, flowering-branches, which altogether form an upright panicle. Leaves opposite, sessile, entire, 3-nerved, the radical ones somewhat spatulate, the rest lanceolate or elliptical. Each flower is sessile, erect, with a greenish tube, and beautiful pink-coloured polished limb. Segments of the calyx narrow and sharp, about half as long as the tube, to which they adhere. *Antheræ* incumbent, twisting into a spiral form as they ripen, which is essential to a true *Chironia*, though not observable in all that Linnæus has called so; see *Icones pictæ plant. rar. tab. 18.* The style is declining; stigma capitate, with a transverse notch. The whole herb is smooth, very bitter, well known among rustic practitioners as a stomachic by the name of Lesser Centaury.

Mr. Curtis first referred this plant to its right genus, but neglected to give it a specific character, the definition for which Dr. Sibthorp quotes him having been given by Linnæus, and intended to distinguish it from other species of *Gentiana*, not of *Chironia*. Botanists are often strangely incorrect about essential characters. They indeed require genius and accuracy, but they are the perfection of the art.—Dr. Stokes has made several excellent remarks on this plant in the 2d edition of *Withering*.

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ronia pulchella. Dwarf branched Centaury

Pentandria Monogynia

in. Lch. Cor. salver shaped. Stamina inserted into the tube. Anthers becoming spiral. Style declining. Seed vessel of 2 inflexed valves

Spe. Lch. Stem herbaceous much branched all the way up. Leaves ovate. Cal-teeth awl shaped above half as long as the tube. Flowers on stalks.

It appears to be annual flowering in Sept.

Phloxes 31



June 11, 1852

RHAMNUS Frangula.

Berry-bearing Alder.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* tubular. *Petals* 5, opposite to the
stamina. *Berry* with few seeds.

SPEC. CHAR. Spines none. Flowers hermaphrodite.
Leaves smooth, entire. Seeds two.

SYN. Rhamnus Frangula. *Linn. Sp. Pl.* 280.
Huds. Fl. An. 98. *With. Bot. Arr.* 240. *Relb.*
Cant. 96.

Frangula, feu Alnus nigra baccifera. *Raii Syn.*
465.

THIS shrub occurs in woods and thickets occasionally in various parts of England, whether in Scotland or not is doubtful. It flowers early in May. The berries are ripe in July.

The stem grows 3 or 4 feet high, with numerous forked branches. Leaves on the young ones only, opposite, obovate, pointed, entire, veiny, of a bright pleasant green. Flowers from the bosoms of the leaves, 2 or 3 together, on simple flower-stalks, greenish, small. Calyx cup-shaped, with 5 reflexed segments, between which stand the little petals, and opposite to them the very minute stamina, with dark purple antheræ. Germen superior, with a very short style. Berry dark purple, with 2 hemispherical seeds.

According to the Dispensatory these berries are sometimes mixed with those of Buckthorn (*Rhamnus catharticus*), or substituted for them, as are even those of the Cornel-tree figured on the last plate. In the latter instance the deception would probably be greater than in the former, for both these *Rhamni* are nearly alike purgative. The work just quoted adds very properly, that these fruits are easily distinguished, by the Buckthorn having 4 seeds, *R. Frangula* 2, and the *Cornus* but 1, or rather 1 nut enclosing 2 kernels.



Scutellaria Benth. & Hook. f. London

E U O N Y M U S europæus.

*Spindle-tree.**PENTANDRIA Monogynia.*

GEN. CHAR. *Petals* 5. *Capsule* with 5 angles, 5 cells, and 5 valves, coloured. *Seeds* in a pulpy covering.

SPEC. CHAR. *Petals* mostly 4, acute. *Leaves* on short footstalks. *Branches* smooth.

SYN. *Euonymus europæus*. *Linn. Sp. Pl.* 286.
Huds. Fl. An. 98. *With. Bot. Arr.* 241. *Relb.*
Cant. 96. *Sibth. Ox.* 82.

E. vulgaris. *Raii. Syn.* 468.

HEDGES and thickets in most parts of England produce this shrub not unfrequently, though it rarely occurs in mountainous countries. The flowers appear early in May; the fruit does not ripen till the autumn, when it continues to ornament the hedges, even after the leaves are fallen, and is frequently joined with holly and miseltoe to adorn houses and churches at Christmas.

This is a small shrub, with straight spreading branches, which are angular when young, having four slightly prominent lines running down them; but these are not always visible; their bark is green and smooth. Leaves nearly opposite, on short footstalks, lanceolate, pointed, serrated, the first pair only being entire. Stipulæ none. Flowers in small, axillary, forked, divaricated panicles, whitish and foetid; the first of them that opens having five stamina, and as many petals, calyx-teeth, and capsules; but all the rest have those parts in fours only. The style is short, simple, and acute. Capsules pink-coloured when ripe, bursting at their outer edges, and each cell containing one whitish seed, enveloped in an orange-coloured pulpy coat. This fruit is reported, even from the days of Theophrastus, to be violently emetic, purgative, and dangerous. That author asserts the leaves to be poisonous to cattle, especially goats, unless they be copiously purged. Dr. Withering says: Cows, goats, and sheep eat this plant. The wood, cut in summer-time, is tough, and used for skewers. Linnæus observes that it makes the best charcoal to draw with.

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Ribes alpinum - Tasteless Mountain Currant

Pentandria Monogynia

Genl - Cal super 5 cleft bell shaped
bearing the Petals & Stamina. Style down
Berry with many seeds -

Spec. Ch. - No thorns. Chertons erect
both in flower & fruit. Bractee
longer than the flower leaves shining
beneath

A native of rocky mountainous woods
in some parts of the North of England & Scotland
This cannot be confounded with any other
British *Ribes*. The small leaves so smooth
& shining beneath the constantly upright
spikes & the insipid Fruit clearly ascertain
it - The Brories so far from having
the sharp acidity of our red Currants are
filled with a mucilage as tasteless as
gum Arabic

The first thing I saw when I

opened my eyes

was a bright light

and a strong smell

of something new

and I felt a great

joy in my heart

and I knew that

was my home

and I felt a great

joy in my heart

and I knew that

was my home

and I felt a great

joy in my heart

and I knew that

was my home

and I felt a great

joy in my heart

Plates 53



Ribes petraeum. Rock Currants

Pentandria Monogynia

Gen. Ch. Cal. super. bell shaped 5 cleft
bearing the petals & stamens. Style
clown. Berry with many seeds

Spec. Ch. No Thorns. Cluster in flower
erect in fruit pendent. Petals bluish-
ish Bractee shorter than the flowers

Gathered in the mountainous country
near Eggleston Durham - flowers in May
& June & ripens its berries a month or
6 weeks later. This is a bushy branched
shrub with leaves not unlike those of
the *R. rubrum* except that they are rather
more downy in general on the under side
particularly about the veins - Cal. green-
ish often stained with red & the Petals
which vary in shape & length but are ge-
nerally blunt are brownish or reddish
Berries globose bright red acid. Bractee
short roundish very blunt recurved ciliated
not so long as even the stalk of the flower



VIOLA lutea.

Yellow Mountain Pansy.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* 5-leaved, lengthened out at the base. *Pet.* 5, irregular; the lowermost spurred behind. *Antheræ* slightly cohering. *Caps.* superior, of one cell, with three valves.

SPEC. CHAR. Stem triangular, unbranched. Leaves ovato-oblong, crenate, ciliated. Stipulæ lobed, palmate.

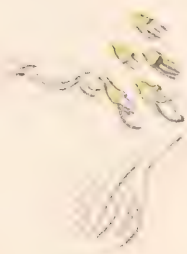
SYN. *Viola lutea.* *Sm. Fl. Brit.* 248. *Huds. ed.* 1. 331. *With.* 263. *Hull.* 192.

V. grandiflora. *Huds.* 380. *Lightf.* 508.

V. montana lutea grandiflora nostras. *Raii Syn.* 249.

THIS Violet, which a superficial botanist might pass by as one of the many varieties of the Common Heart's-ease, differs widely from that species in its place of growth, in being perennial, in having a simple stem, and in the shape of its stipulæ, which are deeply five-cleft and palmate, not pinnatifid nor lyrate, though their middle lobe is larger than the rest.

V. lutea is found only in grassy mountainous pastures, flowering from May to September. It is plentiful in the north of England, Scotland, and the wildest parts of South Wales. The root is small and slender. Stem unbranched, weak and prostrate at the base, then erect, rising to the height of 3 or 4 inches, leafy, triangular, very slightly downy, bearing one or two flowers on very long stalks from the bosoms of the upper leaves. Leaves alternate, on footstalks, more or less ovate, crenate, finely fringed, accompanied by a pair of large, deeply 5-cleft, fringed stipulæ, whose outer lobes are deepest and narrowest. Calyx toothed at the base. Petals either all yellow, with dark-purple radiating veins, or the 2 uppermost are of a blue purple, the rest yellow with a blue tinge; very often the whole are purple. The antheræ are slightly attached to each other. The singular form of the style and stigma is expressed in our figure greatly magnified; the purple line under the stigma is remarkable.



Viola lactea. Cream col. ? Violet

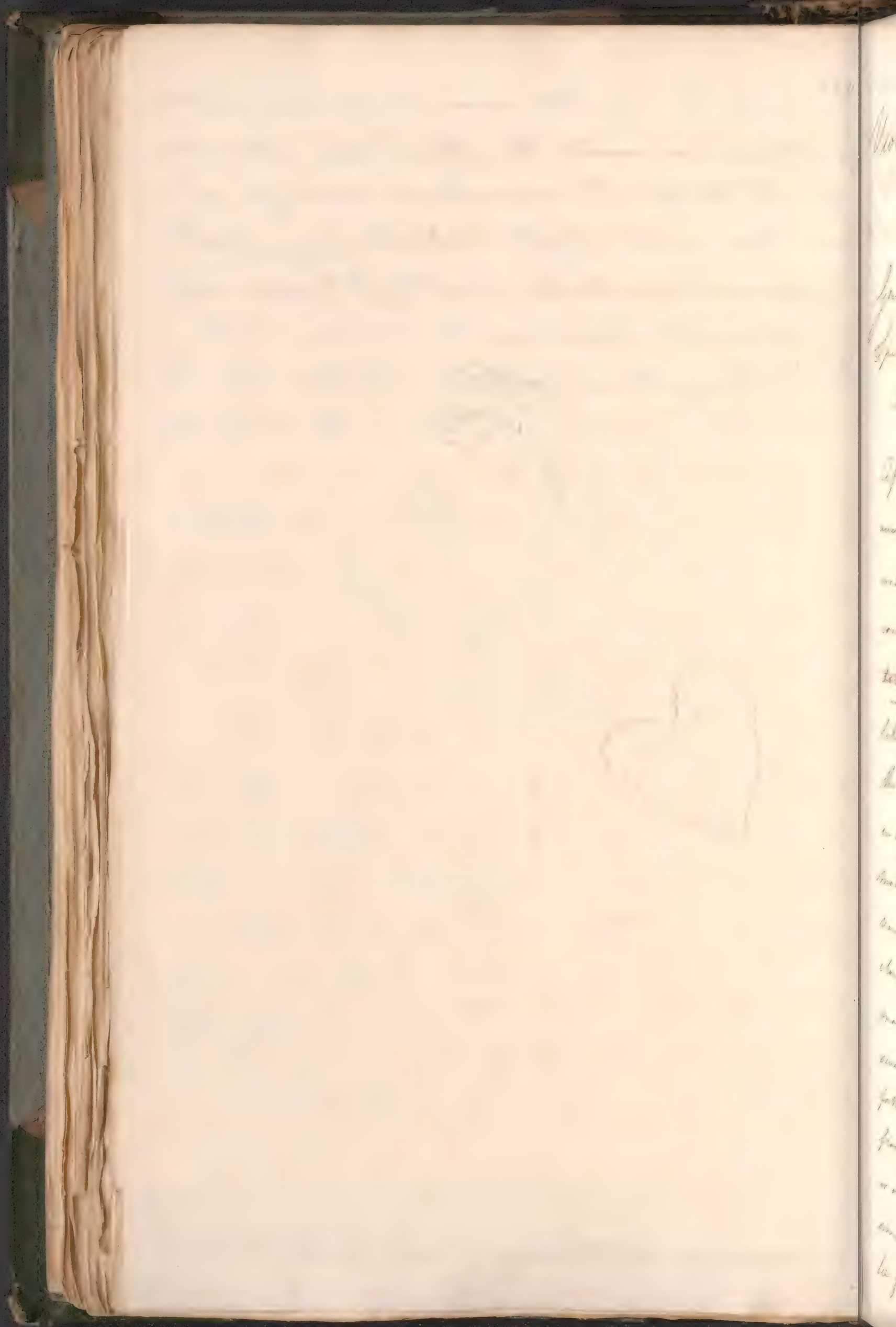
Pentandria Monogynia

Gen. Char. Cal. 5 leaved Petals 5. irregular
lowermost spurred behind. Caps. sup.
of 1 cell with 3 valves

Spec. Char. Stem ascending. Leaves
ovate. lanceolate—

The Root is perennial. Herb in all its parts
much smaller than the *Canina* quite smooth
Stems procumbent at the base & throwing out
Radicles then erect round branched leafy
Leaves alternate on foot stalks about their own
length generally erect lanceolate or emarginate
to ovate decurrent (not cordate) at their base
being crenate rather obtuse. Stipula deeply
toothed & often pinnatifid. Flower stalks
axillary solitary erect rising as high as the
branches each bearing above its middle a pair
of purplish lanceolate Bractea mostly toothed
near their base & at the top one hooding flower.
Cal. leaves linear lanceolate. Petals cream col.

obtusely much narrower than in *V. Canina*
streaked especially the lower one with purple
lines disposed as those in *V. C.* & the 2 side
Petals as in that are hairy above the base
Spur short & blunt Anthers terminating
a broad dilated membrane not cohering
to each other. It flowers in May & has been
found in common



Viola canina (Dogs Violet)

Pentstemon Monogynus

Gen. Ch. Cal. 5 leaved. &c.

Spe. Ch. Stem at length ascending channels
leaves oblong heart shaped. Cal. acute

After the flowers of the fragrant Violet are
over every Copie Heath & shady dell is de-
corated for 2 or 3 Mos with the pale & luscious
corolla of *Viola canina* which are
~~totally~~ without scent. This Species varies
like the preceding in the color of its blossoms
the whole plant is moreover extremely variable
in size & the leaves in form. We are al-
most persuaded that our *V. lactea* is only a
variety of this for culture brings them very
close together. Root perennial somewhat
woody the first flowers are radical. but
several branched angular leafy stems spring
forth & continue growing & bearing numerous
flowers for several weeks. leaves heart shaped
or oblong crenate smooth their foot stalks
smooth somewhat dilated at the top. Stems
be fringed. flower stalks axillary solitary

674
corolla square having 2 anal shaped Bractees in
the upper part & 1 nodding blue flower. Anthers
scarcely cohering. - Cal leaves acute. Stigma
gibbous - Caps rather more oblong than in the
Sweet Violet. - Seeds roundish



Viola palustris - Marsh Violet

Pentandria Monogynia

Gen Char. Calyx 5 leaved. Petals 5 irregular
the lowermost spurred behind - Caps. sup.
of 1 cell with 3 valves

Spec. Char. Stem none. Leaves kidney shaped

in the moist parts of sandy or turfey heaths
more frequent in Scotland & the north of England
than in the south - yet is found plentifully accord-
ing to Mr Curtis near Grogdon & our Specimen
was gathered in Norfolk by Mr Dawson Turner
Root perennial creeping somewhat fleshy with
many fibres. Stem none. Leaves on smooth semi-
cylindrical footstalks spreading kidney shaped more
less pointed crenate veiny smooth of a delicate
tint often purple beneath - Stipulae radical o-
bovate acute smooth scarcely perceptibly serrated
Flower stalks longer than the leaves erect square
smooth with a pair of lanceolate erect bractlets
about the middle. Flowers appearing in May
solitary drooping inodorous paler & smaller than in

The more common Species. Cal. leaves rather
tril slightly membranous at the Edge - The 2
per Petals are scarcely streaked at all the 2
rad ones have one dark longitudinal line &
bordered with white near the Base - The lower one
is beautifully marked with numerous branched
streaks & terminates behind in a short blunt
beaving Spur. The anthers are bordered with
orange col. Membrane but the gathered together
they are scarcely united any more than in other
Species of Viola so that whether the Linnean Sys-
tem remains in its original Form or not this Ge-
nus ought no longer to continue in the Class
Gerania - Stigma acute with a singular Pro-
tuberance above it

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Viola odorata - Sweet Violet

Pentandria Monogynia

Gentle as before

Sp. Ch. Stem & leaves creeping leaves
heart shaped smoothish as well as the foot-
stalks, Cal. obtuse

It requires a moderate degree of shade
& moisture & commonly flowers in March
or April - a white flowered variety sometimes
occurs & a double one preferred by florists &
justly so on account of its richer scent

Plate 34





Niola hirta — Hairy Violet

Germanderium monogynum

Gentle

Sp. h. Stem o. leaves heartshaped
rough as well as their stalks with hairs
Cal. obtuse —

This which differs from the common
sweet one to a careful observer only in
having rather paler & scarcely flowers
is notwithstanding a more distinct spe-
cies from that by far less frequent

It is only found on a Chalk or Limestone
Soil flowering in April or May

Root perennial somewhat woody
Stem o. Leaves simple short prostrate
but not taking root — leaves on long
upright hairy footstalks heartshaped or-
vates veiny clothed on both sides with
short dense hoary hairs — stipules in
pairs radical lanceolate toothed. Flower
stalks taller than the leaves smooth bea-

ring below their middle a pair of lan-
ceolate smooth bracts - Cal smooth
lateral petals marked with a hairy line
as in *N. odorata*. Stamens flat - Anthers
hemispherical in an oblique cald. Membrane
approaching each other but not united. Cap-
sule roundish hairy containing several round
seeds -

Impatiens 35





Impatiens noli me tangere. Yellow Balsam

Pentandria Monogynia

Genl^l Cor of 5 petals irregular with a
hood shaped nectary - Anthers slightly
connected - Caps sup of 5 almost valves
Cal of 2 leaves -

Spec^l Flower stalks solitary bearing
many flowers - leaves ovate. joints of the
stem swelling,

Ray mentions this elegant Plant as a
native of several places in Westmoreland
Hampshire Yorkshire & Wales - We have
seen it plentifully about the North End of
Wandermer in watery spots - It will
succeed well in shady gardens scattering
its seeds spontaneously with more success
than if sown by hand. Root annual
branched fleshy spreading horizontally stem
solitary erect about 2 feet high branched tops
round succulent very smooth & polished
leaves alternate on foot stalks ovate obtuse per-
sented smooth very - flower stalks axillary
& branched bearing 4 or 5 large handsome pendu-

four flowers. yellow spotted internally with red
consisting of a horn shaped (perianth) Supper
Petal & 2 large lateral lobed ones accompanied
at the base with 2 small entire Petals united
to them. Anthers united at their bases rather
than their summits. The staminal tubes of the Caps.
when ripe curl up & fly asunder at the
slightest touch when at home

Meccorum 36



Meebrium verticillatum - Whole Knot Grass

Pentandria Monogynia

Grass - Cal of 5 leaves cartilaginous
infr - Cor. 5. Caps of 5 Valves with
1 cell - Seed 1 -

Spe Ch. Flowers white without
Bractea Stems prostrate

No part of Britain except Cornwall
& Devonshire has been hitherto known to
produce this plant - It grows in moist
boggy places flowering in July - Root
creeping perennial - Herb smooth - Stems
prostrate a little branched clothed with
numerous pairs of opposite nearly sessile
ovate entire rather fleshy leaves which are
accompanied above their insertion by mem-
branous lacerated stipules. Tufts of flowers
forming a small whorl grow out of almost
every pair of leaves - The Cal. consists of 5
white oblong leaves thick & fleshy hollowed
out on the inside & each tipped with a curved

bristle - the Stamens are shorter than the
cal & stand on a kind of ring with 5
reddish all shaped Rays ranged alternately
with them on the same basis which look
like Petals - but their insertion & the and
copy of other Plants of this Natural Order
rather indicate them to be of the nature of
barren filaments We know not whether
they are found in every species of *Meedrom*
The Germ is ovate Style very short Stigma
and with 5 small notches - Caps of Cells
but formed of 5 valves - the most certain
mark of the genus - Seed solitary ellipti-
cal tapering round not compressed.

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John. Bot. Lond. 1791.

GLAUX *maritima*.

Black Salt-wort.

PENTANDRIA *Monogynia*.

GEN. CHAR. *Cal.* one-leaved, campanulate. *Cor.* none.
Capsule superior, one-celled, five-valved, and five-seeded.

SPEC. CHAR. Only one species known.

SYN. *Glaux maritima*. *Linn. Sp. Pl.* 301. *Huds. Fl. An.* 101. *With. Bot. Arr.* 246. *Raii Syn.* 285.

NOTHING can be more common than this pretty little plant in salt marshes. It enlivens large tracts of the dreary and wretched situations where it is found, with its purplish flesh-coloured or whitish flowers, which are produced in great abundance in the summer, standing solitary, and with scarcely any foot-stalks, in the bosoms of the leaves.

The root is perennial and creeping.

The whole plant is succulent and salt to the taste. Dr. Withering remarks that cows eat it.

Glacy 37

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Published by J. Sowerby May 1st 1799.

THESIU M linophyllum.

Bastard Toad-flax.

PENTANDRIA Monogynia.

GEN. CHAR. Cor. none. Cal. of one leaf, bearing the stamina. Seed one.

SPEC. CHAR. Spike branched. Bractææ ternate. Leaves linear-lanceolate. Tube of the calyx very short.

SYN. Thesium Linophyllum. Linn. Sp. Pl. 301.

Huds. Fl. An. 101. With. Bot. Arr. 247. Relb.

Cant. 99. tab. Sibth. Oxon. 414.

Linaria adulterina. Raii Syn. 202.

WE have received this plant from Sir Thomas Cullum, and the Rev. Mr. Hemsted, gathered near Bury and Newmarket, and also from the Lime-kiln hill, near Shouldham in Norfolk, where (for the first time, to our knowledge, in that county) it was found by the Rev. Mr. Forby. It grows on a chalk soil, flowering in July.

Root woody, branched, crooked, whitish, perennial. Stems several, reclining, 5 or 6 inches high, but little branched, angular and striated, clothed with numerous alternate linear leaves, all pointing one way, somewhat glaucous and succulent, entire. The whole herb is destitute of pubescence, but the edges of the leaves, bractææ, and angles of the stem appear rough under a microscope. Flowers in spikes (mostly branched, and sometimes so compound as to form a panicle), solitary, on alternate flower-stalks, with 3 bractææ close to each flower shaped like the leaves, but in the lower part of the spike one is much larger than the other two. Calyx funnel-shaped, the tube very short and open, margin spreading, 5-lobed; lobes triangular, with a tooth on each side near the base, very white above, and at the margin beneath. Stamina 5, opposite to the calyx-lobes. Style erect, equal to the stamina. Stigma with 2 knobs. Seed oval, 5-angled, striated, hard, invested with the permanent calyx. The herb is scarcely bitter, a little saltish.

This without doubt is *T. Linophyllum*, but when cultivated, as Linnæus had it, the whole herb becomes luxuriant, the spike panicled and leafy, according to his definition. *T. alpinum* differs from this in having a long tubular calyx; otherwise they are much alike. The intermediate kind, mentioned in Withering, we believe to be the proper wild appearance of *Linophyllum*.

Viola major. Greater Pimpernel

Pentandria Monogynia

Gen. Ch. Cor. twisted salver shaped
 Pouches 2 erect seeds without Beak
 or Wing

Spec. Ch. Stems erect - leaves ovate
 finely fringed. Flowers on stalks

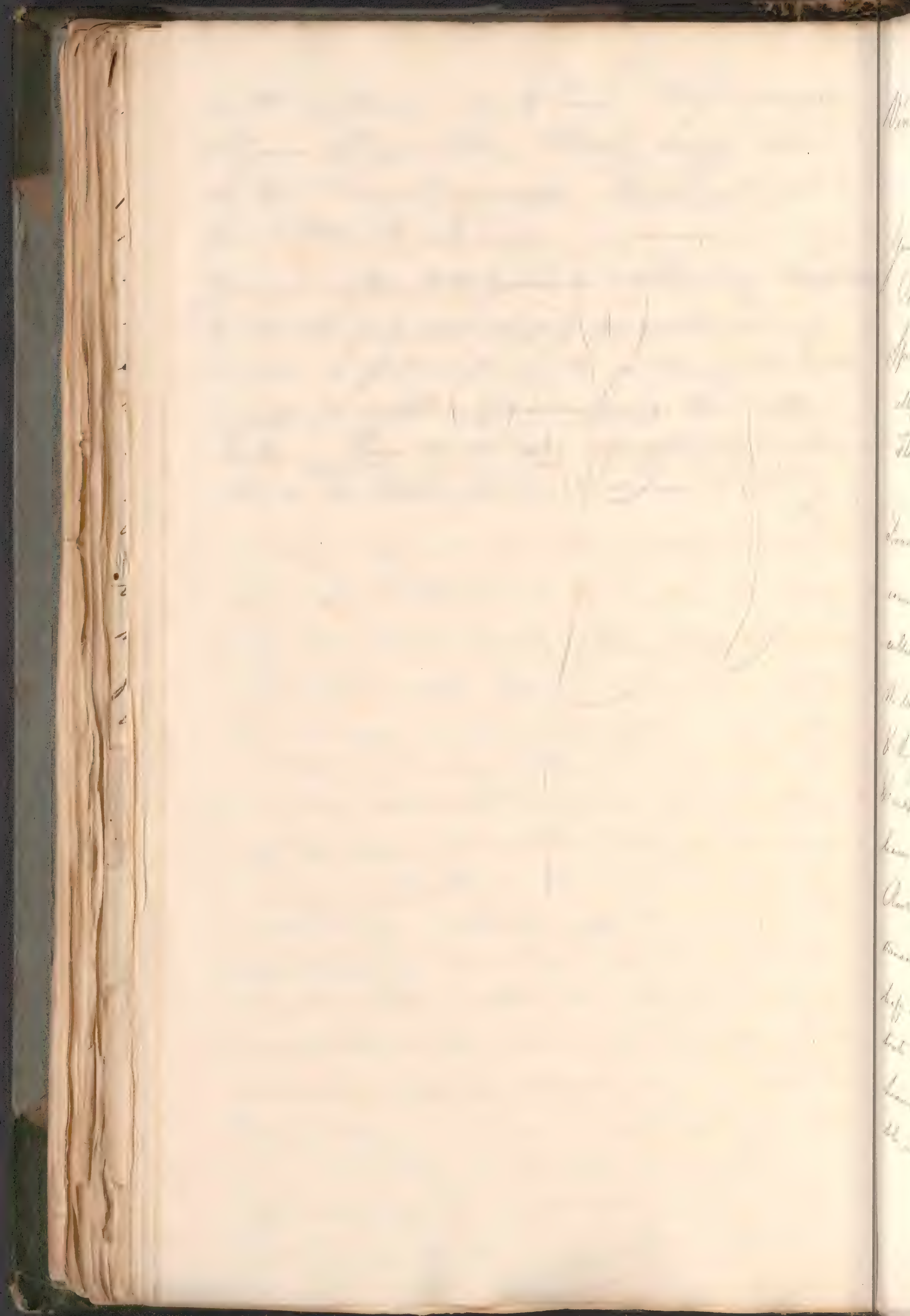
In Hedges & groves not very unfre-
 quent in a truly wild state - flowers
 in May. Root perennial creeping
 stems roundish & leafy some trail &
 throw out roots others grow erect & bear
 flowers - but even these afterwards take
 root from near their extremities. Leaves
 opposite on foot stalks ovate entire finely
 fringed on their edges with short rigid
 hairs otherwise smooth & shining. Flowers
 solitary axillary alternate on stalks about
 half the length of the leaves. Cal. in 5 awl
 shaped fringed segments as long as the tube of
 the flower. Cor. of a fine purplish blue sal-
 ver shaped. twisted. its tube inflated &
 5 sided in the upper part. Stamina inser-
 ted about its middle bowed ciliated & com-
 pressed. Anthers hooded. Germen double

with 2 glands at its base. Style simple
Stigma shaped like a Pallet orange coloured
its top 5 lobed & downy. The Fruit which
few Botanists have seen is produced every
Year in Mr Kets Grounds at Suttering Norfolk
& consists of 2 oval shaped smooth shining
pouches or folliculi each containing 1 or 2 ob-
long seeds with a groove down their upper
side. These seeds are roughish but ma-
ked or destitute of beard down or wing

North 39

Portland

Monmouth



Ninfa minor Super Periwinkle

Centandria monogyna

Ymkh Cor. bristled Salver shape
 Pouches 2 erect. Seeds without beard or wing,
 Spr. lch. Stems procreant. Leaves
 elliptic lanceolate smooth at the edge
 Flowers on stalks. Cal. teeth lanceolate

From Chippow Yorkshire - far less
 common than the greater P. - generally
 cultivated in shady places under trees
 the wild Plant blooms earlier than *N. major*
 & the garden varieties one of which is double
 & reddish & another white with variegated
 leaves are found in bloom even in March
 Root perennial & creeping. Whole Plant,
 smooth & shining. Stems round slender,
 leafy erect when in flower afterwards pro-
 strate elongated taking root at the joints
 leaves are deciduous of the fringed edge observa-
 ble in *N. major*

5^a 2^{me}





Thymus, by det. C. C. 1804

HERNIARIA glabra.

Smooth Rupture-Wort.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* in 5 segments. *Cor.* none. Five barren *stamina*. *Capsule* with one *seed*.

SPEC. CHAR. Herbaceous and smooth.

SYN. *Herniaria glabra*. *Linn. Sp. Pl.* 317. *Huds. Fl. An.* 108. *Willd. Bot. Arr.* 250.

Herniaria. *Raii Syn.* 160.

THIS was found in Ray's time in gravelly soil about the Lizard point, Cornwall, where it still grows abundantly. The Rev. Mr. Hemsted gathered this wild specimen near Newmarket.

Root taper, annual. Stems several, various in length, spreading flat on the ground in the form of a star, alternately branched, round, sometimes minutely pubescent. Leaves opposite about the lower part of the stem, one often smaller than the other, elliptical, entire, smooth. *Stipulæ* membranous. Flowers in leafy clustered racemi, opposite to the solitary leaves, small, green, short-lived, very numerous. The calyx is closed after flowering, and embraces the ripening capsule. It flowers about July and August.

Whence this plant obtained its absurd name, and credit for curing ruptures, is hardly worth enquiring.

The variety β of Mr. Hudson is manifestly (from Plukenet's figure copied by Petiver) nothing but *Glaux maritima*. What *H. lenticulata* of Linnæus may be, it is not our purpose now to determine, but there is much reason to suppose it *Cressa cretica*.

Memoria 1



Chenopodium olidum - Stinking Goose foot

Pentandria digynia

Sp. Ch

Sp. Ch Leaves ovate somewhat rhomboid entire. Flowers in dense clustered spikes. —

Frequently occurs about London — in general it is more plentiful about the Sea coast flowering in Aug.

The whole plant is of a dull glaucous or greyish green — invested with a greasy mealy substance which when touched exhales a most odious & lasting smell — like that of stale Salt fish — which Soler tells us is very attractive to dogs —



CHENOPODIUM urbicum.

*Upright Goosefoot.**PENTANDRIA Digynia.*

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

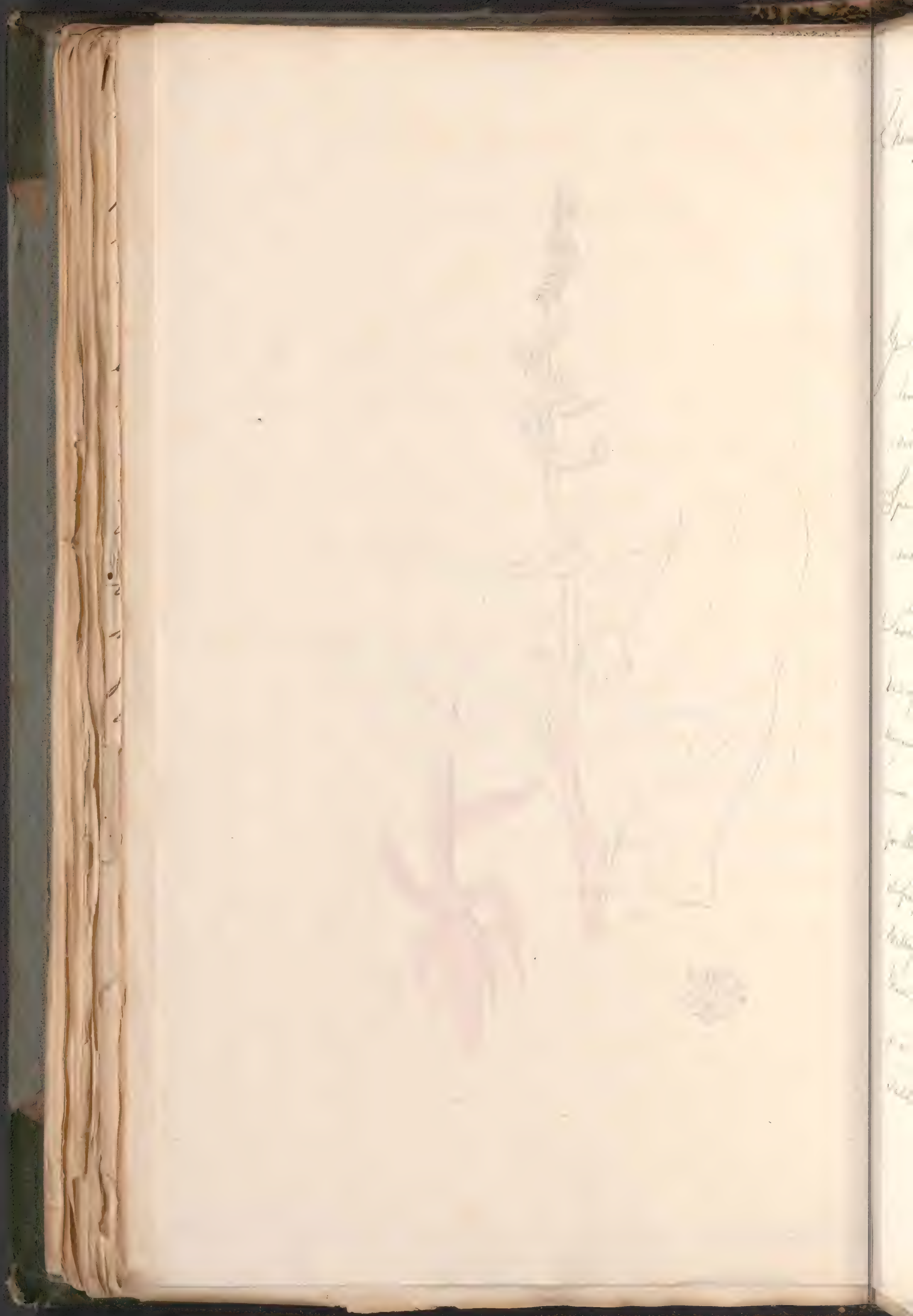
SPEC. CHAR. Leaves triangular, toothed. Clusters dense, very straight, long, approaching the stem, and almost leafless.

SYN. *Chenopodium urbicum.* *Linn. Sp. Pl.* 318. *Sm. Fl. Brit.* 273. *Huds.* 104. *With.* 270. *Hull.* 56. *Sibth.* 87. *Abbot.* 54.

C. erectum, foliis triangularibus dentatis, spicis e foliorum alis plurimis longis erectis tenuibus. *Dill. in Raii Syn.* 155.

THIS is one of the most difficult to ascertain of all our British species of *Chenopodium*, and I confess myself entirely obliged to Mr. Curtis in his *Fl. Lond. fasc. 6. t. 21*, for a decisive mark to distinguish it from the *rubrum*, which consists in the ripe seeds of the latter being no larger than grains of writing sand, whereas those of the plant now before us are at least five times that size, or about as big as Rape seed. In the red or green colour of the stem and flowers both plants vary. *C. urbicum* however has the leaves in general more truly triangular, less lengthened out at the base, and not so deeply sinuated as the other; clusters more straight and erect, at length close-pressed to the stem, and almost destitute of the little leaves so copiously interspersed among the flowers of *C. rubrum*. The flowers in both are occasionally polygamous; but the calyx being universally regular, five-cleft, and not much enlarged after flowering, clearly separates *Chenopodium* from *Atriplex*.

C. urbicum is common in St. George's fields, flowering in August and September. It is annual, and thrives on dunghills and waste places about towns or villages. We have specimens from Norfolk, Oxfordshire, and Bedfordshire.



Chenopodium Bonus Henricus - Pers^e

Goosefoot

Centandria Sijyma

Sp. Ch. Cal 5 cleft inf. Cor o. Sud 1
 Lenticular invested with the closed 5
 sided Caly.

Sp. Ch. Leaves triangular arrow shaped
 entire. Spikes compound leafy. -

Perennial flowering from May to the
 End of the Summer by which it is dis-
 tinguished from other B. plants of this ge-
 nus. which are all annuals flowering
 for the most part late in the Autumn.

it frequently occurs in waste grounds about
 Villages farm Yards & Cottages. - The young
 Herb boiled is a good Substitute for Spinach
 & is in some places cultivated for the
 table

Chenopodium 2





Chenopodium Maritimum Sea Goosefoot

Portulaca Oleracea

Genlth as before

Spe the leaves and shape semi cylindrical
flowers axillary sessile

A very frequent Plant on the Sea shore more
especially when the Soil is muddy flowering
about July & Aug^r. Mr Doody has obser-
ved that this herb is an excellent "hoits Salad"! it
abounds like many other Maritime plants
with alkaline Salt & is one of those which are
indiscriminately collected in the warmer parts
of Europe for the purpose of making Glass-



1847 95 Published by J. P. Sowerby London.

B E T A *maritima*.

Sea Beet.

P E N T A N D R I A *Digynia*.

GEN. CHAR. *Calyx* 5-leaved. *Cor.* none. *Seed* kidney-shaped, within the substance of the base of the calyx.

SPEC. CHAR. Stems procumbent. Flowers in pairs. Calyx entire.

SYN. *Beta maritima*. *Linn. Sp. Pl.* 322. *Huds. Fl. An.* 108. *With. Bot. Arr.* 257.

B. sylvestris maritima. *Raii Syn.* 157.

A N A T I V E of the sea shore in several parts of England, more especially in muddy places. Dr. Smith found it by the river side just below Lynn, with *Atriplex pedunculata* and other rarities. The specimen here delineated was gathered near Scarborough by Mr. William Travis, and we are the more obliged to this gentleman for his communication, as there is no figure of *B. maritima* extant.

Root, according to Ray, perennial, by which he says it differs from the garden Beets; its substance thick and fleshy. Stems several, prostrate, a circumstance which the form of our page would not allow of being duly expressed in the plate. Leaves succulent, the edge waved but entire, decurrent into the footstalk; the radical ones numerous and larger; those on the stem all turned upwards from the ground, and bearing in their *axilla* clusters of small leaves and flowers. The stem terminates in a more or less compound leafy spike, bearing the flowers either in pairs or solitary, never many together, by which circumstance, added to its prostrate stem and consequently vertical stem-leaves, and the keel of the calyx-leaves being entire, not toothed as in *B. vulgaris*, this species is with certainty distinguished, according to Linnæus, who cultivated it in his garden, and remarks that it flowered the first year. He thought it an annual. With us it appears to be perennial, flowering in August and September. The stigmas are very frequently three in number.

Letter 3

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Labrador 4





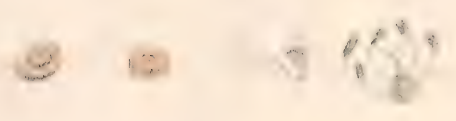
Salsola fonticosa - Shrubby Saltwort

Endemic in Abyssinia

Genlth as before

Spurth erect shrubby. Leaves semi-cylindrical bluntish without Spines

First discovered by the famous Dr. J. Brown Med author of Religio Medici. - It is now found in the Norfolk & Suffolk Coasts - it forms an elegant evergreen Shrub flowering in July & Aug not unworthy a Place in Gardens. - it is propagated by Layers scarcely if at all by cuttings. The Stem is about 2 feet high or more erect branched woody. The branches also erect & thickly clothed with alternate opposite semicylindrical bluntish succulent rather glaucous leaves. flowers inconspicuous opposite solitary green with 3 small Bracts - Seeds top shaped its cotyledons deep convoluted than those of the last Species. The leaves have an herbaceous flavour with a slight degree of Salt & some acrimony.



Salsola Kali — Prickly Saltwort

Pentandria Aegyptia

Genl. Cal. 5 left its base capsular

Cor o. Seed 1 with spiral cotyledons

Spec. Ch. Herbaceous prostrate. Leaves
and shaped spinous rough flowers axillary

Cal. margined

Very abundant on all sandy Sea shores
flowering copiously in July. Root annual
This contributes more generally to the manufac-
ture of soda for making Glass than *Chenopo-
dium Maritimum* but is not reckoned equal
to some other Species of S.



GENTIANA Amarella.

Autumnal Gentian.

PENTANDRIA Digynia.

GEN. CHAR. Cor. of one petal. Capsule superior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla five-cleft, salver-shaped, bearded in the orifice. Segments of the calyx equal.

SYN. Gentiana Amarella. Linn. Sp. Pl. 334. Hudf. Fl. An. 103. With. Bot. Arr. 262. Relb. Cant. 100. Sibth. Oxon. 85.

Gentianella fugax autumnalis elatior, Centaurii minoris folio. Raii Syn. 275?

β G. fugax verna seu præcox. Raii Syn. 275.

FOUND in grassy pastures above lime-stone rocks, varying in size according to the degree of moisture, and flowering in August and September—The variety β flowers from April to June.

Root annual, twisted, yellowish. Stem square, erect, bearing several pair of sessile, ovate, 3-nerved, dark-green leaves, and clothed from top to bottom with flowers, on short, axillary, forked side branches, one being terminal. Calyx pale, with green ribs, and divided half way down into 5 lanceolate, nearly equal, segments. Tube of the corolla twice as long as the calyx; limb in 5 segments, rarely but 3 or 4, horizontal when the sun shines, the orifice crowned with a purple upright fringe, which conceals the stamina. Germen oblong; styles very short; stigmas divaricated. The whole herb is intensely bitter, and possesses the stomachic virtues of its congeners.

It is extremely difficult to ascertain the 3 Gentians mentioned in Ray's Synopsis, 273. Neither he, nor his editor Dillenius, seems to have been aware of the real difference between G. Amarella and campestris, and their Synonyms are almost all quoted with hesitation. We can therefore only guess, from the slender materials before us, what they intended.—As to the Vernal dwarf Gentian, we quote it as a variety, having been favoured with a specimen gathered by the late accurate Sir John Cullum, on the heath between Grantham and Ancaster, in flower June 6, 1774, which he therefore reasonably presumed was the above plant of Ray. But it differs in no respect from G. Amarella, except in time of flowering. As we are on the ground of conjecture, may not such early-flowering specimens be some that happened to spring up in the preceding autumn, and stood the winter?

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Published by J. Sowerby del. March 1. 1795

GENTIANA campestris.

Field Gentian.

PENTANDRIA Digyna.

GEN. CHAR. Cor. of one petal. Capsule superior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla four-cleft, bearded in the orifice. Two outer segments of the calyx very large.

SYN. Gentiana campestris. Linn. Sp. Pl. 334. Hudj. Fl. An. 103. With. Bot. Arr. 262. Sibth. Oxon. 86.

G. pratensis flore lanuginoso. Raii Syn. 275?

WE received this from near Bury, along with the preceding. It grows in pastures, more particularly towards the sea; nor is it so much confined to a lime-stone soil as that species. It is annual, flowering in September and October.

This in habit is much like the last, though rather paler in colour altogether, and never so tall: the stem being less drawn up, the flowers fewer, and on longer flower-stalks, they appear more corymbose. But the essential and all-sufficient mark of distinction is in the calyx being deeply divided into 4 unequal segments, 2 of which are external, opposite, oval, very large, completely enfolding and concealing the 2 others, which are lanceolate and not a fifth part so broad. This character was noted by Linnæus in *Flo. Lapponica*, and is adopted by Haller. Surely it ought to have been mentioned in *Sp. Pl.* But it is still more wonderful that Linnæus should have doubted whether this were a sufficient distinction.

When we presume ours to be the above plant of Ray, we by no means believe it to be also that of Bauhin, which is most probably (as all authors suppose) *G. Amarella*.

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J. Sowerby del. June 1. 1791.

GENTIANA Pneumonanthe.

Marsh Gentian, or Calathian Violet.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of one petal. *Capsule* superior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla bell-shaped, five-cleft. Flowers on foot-stalks. Leaves linear.

SYN. *Gentiana Pneumonanthe.* *Linn. Sp. Pl.* 330.
Huds. Fl. An. 102. *With. Bot. Arr.* 261.

G. palustris angustifolia. *Raii Syn.* 274.

WE are indebted for the wild specimen here figured of this rare and beautiful Gentian to the Rev. Mr. Charles Sutton, B. D. of Norwich, who gathered it on Stratton Strawless Heath, a few miles from that city, the very place in which it was found by the amiable Stillingfleet many years ago. It usually prefers a wet turfy soil, and flowers in August.

Mr. Sutton remarks that the leaf varies in figure from *linear* to almost *spatulate*; that the antheræ are united till the capsule swells, and forcibly separates them; and that after a wet spring the plant is found much more luxuriant, bearing five, six, or seven flowers, instead of one or two.

Such a gigantic specimen appears to have occasioned Linnaeus to define it *corollis oppositis*, having *opposite corollas*, or rather *flowers*; but we have omitted this in our specific character, as tending to mislead. The connection of the antheræ is full as remarkable as that of *Lobelia*, and more so than in *Viola*; both which, on account of such an adhesion, are placed in the class Syngenesia: but the inconstancy of this character, except in *compound flowers*, seems to authorise the abolition of the order Syngenesia Monogamia altogether.

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Gentiana verna. Spring Gentian

Pentandria Digynia

Gen. Ch. Cor. of 1 Petal. Caps. superior 1
celled 2 valved with 2 longitudinal
receptacles

Spec. Ch. Cor. 5 leaf. Salver shaped. crenate
Segments toothed at their base - leaves
clustered axate

This very elegant Plant was gathered in
April in Tiesdale Forest Durham -

The Root is perennial thread shaped &
creeping. Stem about an inch high simple
single flowered thickly clothed with leaves
which are more especially clustered in the
lower part & are of an ovate form entire ge-
nerally pointed. Flower solitary terminal
much larger. Cal. with 5 waved carinated
angles & 5 equal sharp Teeth. Cor with a
plaited cylindrical tube twice as long as the
Calyx & a flat limb in 5 equal obovate

crenated lobes of a most vivid blue with a
tooth on each side at their base - Stamina
shorter than the tube Germen cylindrical.

Style really simple with a flat feathery 2 lobed
stigma - The whole herb is smooth leaf better
than most Gentians - Sometimes the flowers are
of a paler blue

September 5



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Gentiana nivalis Small alpine
Gentiana Degenia

Gentiana

Spurth Cor 5 left funnel shaped
 angles of the Cal even acute - Stem
 many flowered

Truly does this hardy little Plant
 deserve the name *nivalis* for on the
 Alps it is only to be found above the limits
 of perpetual frost & in our own Country
 it has been observed nowhere but near
 the summits of 1 or 2 of the highest Moun-
 tains in Scotland which are seldom 3
 months in the Year without Snow -
 It is annual flower, in July or Aug
 & quickly ripens its seed



GEY, C.

Spec. C.

SEX. F.

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By the way, I have a small collection of books on the history of the city of New York, which I have been collecting for some time. I have a few books on the history of the city of New York, which I have been collecting for some time.

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ERYNGIUM campestre.

Field Eryngo.

PENTANDRIA Digynia.

GEN. CHAR. *Flowers* in little dense heads. *Receptacle* scaly.

SPEC. CHAR. Leaves embracing the stem, divided in a pinnated manner.

SYN. Eryngium campestre. *Linn. Sp. Pl.* 337. *Huds. Fl. An.* 110. *With. Bot. Arr.* 264.

E. vulgare. *Raii Syn.* 222.

ALTHOUGH very common on the continent, and therefore denominated *vulgare* by Bauhin, Camerarius, &c. this species is so very rare in England, that we cannot follow those British authors, however respectable, who name it *common Eryngo*. We are assured by the Rev. Mr. Wood, of Leeds, that it still grows by the Watling-street road, opposite Brookhall, near Daventry, as mentioned by Ray. Our figure was drawn from a garden specimen compared with a wild one, with which it perfectly agreed.

The root is perennial and strong. Stem a foot high, much branched. The whole plant very rigid, and of a pale green. It flowers in July and August. The petals are white or purplish.

Egyptian

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ERYNGIUM maritimum.

Sea Eryngo.

PENTANDRIA Digynia.

GEN. CHAR. *Involucrum* of many leaves. *Flowers* in little dense heads. *Receptacle* conical, scaly. *Seeds* bristly.

SPEC. CHAR. Radical leaves roundish, plaited, spinous. Heads of flowers on stalks. Scales three-cleft.

SYN. *Eryngium maritimum*. *Linn. Sp. Pl.* 337. *Sm. Fl. Brit.* 288. *Huds.* 109. *With.* 283. *Hull.* 58. *Woodv. Med. Bot. t.* 102. *Dicks. H. Sicc. fasc.* 10. 3. *E. maritimum*. *Raii Syn.* 222.

COMMON in the loose sand of the sea shore, flowering in July and August.

Root long, creeping, perennial. Herb very rigid, all over glaucous, which renders it strikingly conspicuous, and every part is smooth. Stem round, furrowed, branched and bushy, about a foot high. Leaves of a roundish kidney-shape, plaited, lobed, ribbed, with spinous teeth; the radical ones are more rounded, and stand on foot-stalks. Flowers in dense blue terminal heads, each surrounded by an involucre like the leaves. Scales of the receptacle three-cleft, whereas those of *E. campestre*, *t.* 57, are simple. Petals hooked.

"Eryngo roots and Bohea tea" have been celebrated by our most witty poet Prior for their restorative or stimulating qualities. Under this idea, perhaps not ill-founded with respect to the Eryngo, these roots have been much used in domestic medicine, and are sometimes sold candied; a very elegant mode of preparing them. A shop at Colchester, Mr. Great's, has been famous for them for several generations.

Hydrocotyle 7





HYDROCOTYLE vulgaris.

Marsh Penny-wort. White-rot,

PENTANDRIA Digynia.

GEN. CHAR. Umbel simple. Involucrum of about 4 leaves. Petals undivided, Fruit circular, compressed.

SPEC. CHAR. Leaves peltate, Umbels of five flowers.

SYN. Hydrocotyle vulgaris. Linn. Sp. Pl. 338. Sm. Fl. Brit. 290. Hudf. 110. With. 284. Hull. 58. Relb. 107. Sibth. 91. Abbot. 57. Curt. Lond. fasc. 6. t. 19. Raii Syn. 222.

ON boggy commons, moist heaths, and all watery places in general that are not stagnant, the *Hydrocotyle vulgaris* abounds, and may be found in flower from May to the end of June. The herb is perennial, and the prostrate stems spread very far, taking root at every joint, and also producing from the same point several upright, simple, smooth or hairy, footstalks, each of which supports a horizontal, peltate, roundish, crenate, smooth and shining leaf, as well as one or more flower-stalks not so high as the leaves, having a pair of bractæ at their base, and bearing an umbel of 5 flowers, which is often proliforous, producing another such umbel from its centre; but the partial stalks are never branched or compounded like those of most umbelliferous plants; indeed they are so short as to be scarcely discernible. Involucrum of 4 or 5 membranous leaves. Calyx very minute. Petals ovate, spreading, undivided, white or reddish. Fruit orbicular, furrowed, compressed.

The name of White-rot was given from a supposition that this plant caused the disease in sheep called the rot; but it is doubtful if they will ever taste it, and most people now attribute that disease to the animals inhabiting wet pastures, where indeed the *Hydrocotyle* grows, but which are in some other way noxious to their constitution.



L. mor.

SANICULA europæa.

Wood Sanicle.

PENTANDRIA Digynia.

GEN. CHAR. *Umbels* clustered in little heads. *Fruit* rough. Central *flowers* abortive.

SPEC. CHAR. Radical leaves simple. Flowers all sessile.

SYN. *Sanicula europæa*. *Linn. Sp. Pl.* 339. *Huds. Fl.* An. 110. *With. Bot. Arr.* 266. *Relb. Cant.* 108.

Sanicula five Diapensia. Raii Syn. 221.

COMMON enough in woods, growing among dead leaves of trees, and flowering with the first heralds of summer in May. Gerarde says "it joyeth in a fat and fruitfull moist soile." He also remarks that "it is used in potions which are called Vulnerarie potions, or wound drinkes, which make whole and sound all inward wounds and outward hurts." Unhappily the experience of mankind since good Gerarde wrote has rather impaired the credit of such sovereign medicines. Ignorance is ever prone to confidence and wonder. The herb is bitter and pungently aromatic, but seems to partake of that virose acrimony usual in umbelliferous plants which "joy in a fat and moist soile," and which is improved to a wholesome aromatic flavour in dry elevated situations.

The root is perennial, with long branched fleshy fibres. Leaves mostly radical, elegantly lobed and ciliated, deep green above, paler and more shining beneath. Stem twelve or eighteen inches high, but little branched, furrowed. Flowers often reddish. The central flowers of each little head or umbel have no styles, but in their place a glandular nectary (*Withering*). The petals are all nearly equal; they are wanting in the seed-bearing flowers, as Scopoli remarks.

Senecio P

(30)

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BUPLEURUM rotundifolium.

Thorow-wax.

PENTANDRIA Digynia.

GEN. CHAR. *Involucrum* longer than the umbels, five-leaved. *Petals* curled in. *Fruit* roundish, compressed, striated.

SPEC. CHAR. No general involucrum. Leaves perfoliate.

SYN. Bupleurum rotundifolium. *Linn. Sp. Pl.* 340. *Huds. Fl. An.* 111. *With. Bot. Arr.* 267. *Relb. Cant.* 108.

B. perfoliatum rotundifolium annuum. *Raii Syn.* 221.

A SOMEWHAT unfrequent annual in corn-fields, generally preferring a dry and chalky soil. Mr. Lewin communicated it from the neighbourhood of Dartford in Kent.

This herb like the Sanicle has the reputation of being a vulnerary, a quality which no medicine can have, any otherwise than as a tonic strengthening the constitution, nor can any external application be specifically healing or consolidating, nor be useful in any other way, than as a defence from the air.

The root is small and fibrous. Stem alternately branched, a little zigzag, clothed with singularly perfoliate leaves, which have occasioned the English name, from the old word *wax*, to grow. Both leaves and involucra are entire and sharp pointed. The flowers are yellowish and inconspicuous, coming out in June and July. Every part of the herb is remarkably hard and rigid, and has a slight aromatic smell.

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Eupatorium tenuispinum

Slender Thorough-wax or Hares Ear

Pentandria Digynia

Gen. Ch. Involucreum longer than the Umbels, 5 leaved. Petals corollate. Fruit roundish compressed & striated

Spec. Ch. Umbels simple alternate of about 3 flowers with an Involucreum of 5 awl shaped leaves.

Gathered in plenty by Mr S. F. Foster on the shore near Waukegan in Supria. It prefers a muddy soil overflowed by Salt Water. Blooms in August & Sept.

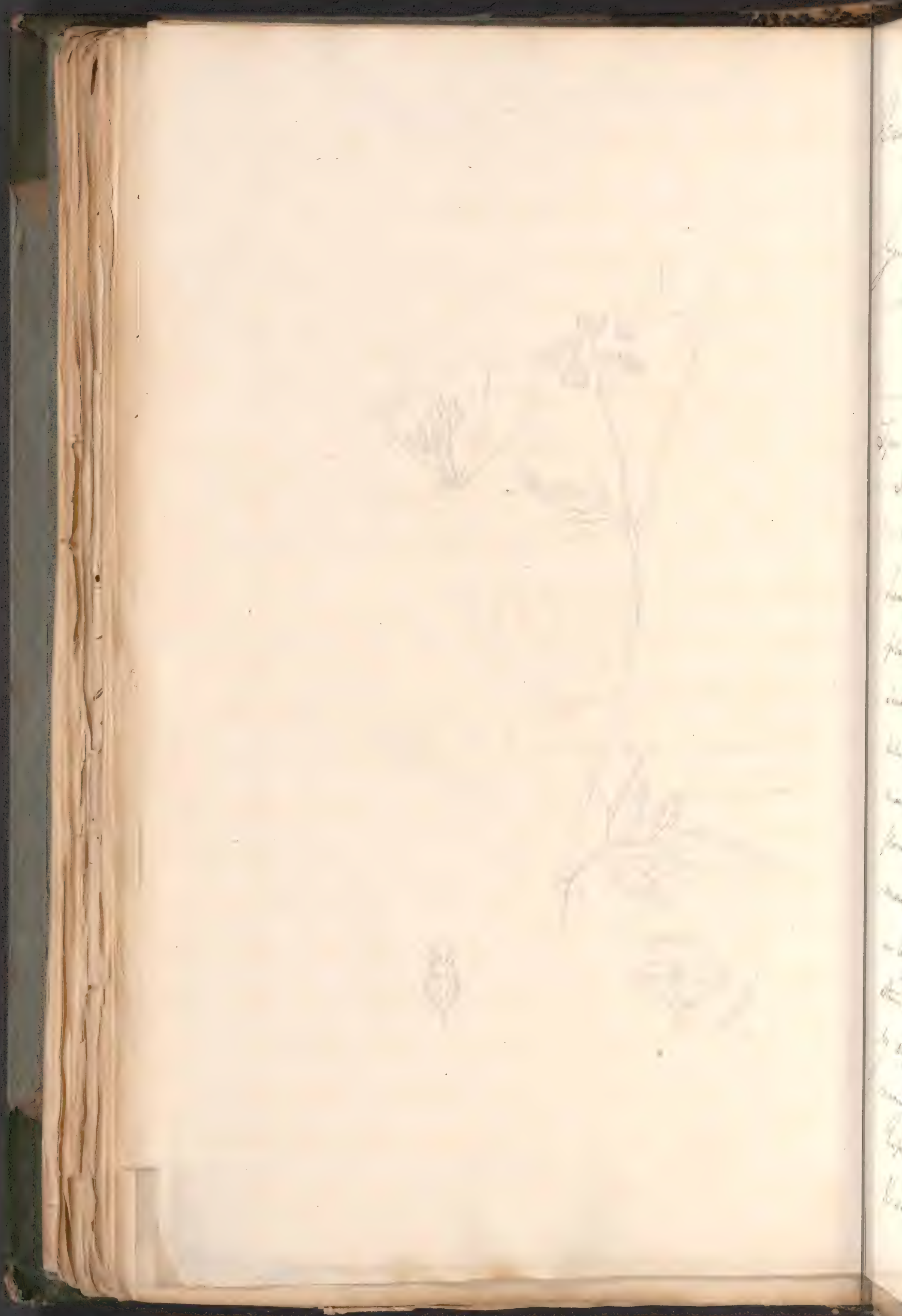
Appendix

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Caucasia 10

[The following text is extremely faint and illegible due to fading and bleed-through from the reverse side of the page. It appears to be a list or a series of entries.]



Caucalis anthriscus - Upright Hedge Parsley

Psoralea argyræa

Genl. Ch. Invol. general & partial undivided

Cor. radiate florets of the Centre male

Fruit nearly oval striated rough
with rigid bristles

Spec. Ch. Umbels of many close Rays genl.
Invol. of many leaves. leaflets pinnatifid
branches nearly upright

Linnaeus undoubtedly was in referring this
plant to the genus *Toodylicium*. Its bristly
seeds abortive flowers whole structure & ha-
bits make it a *Caucalis* - few weeds are
more general in hedges & borders of fields the
flowers which are either white or reddish are
most abundant in July & the seeds plentiful
in Aug. & Sept. Root annual & tapering
stem erect 2 or 3 feet high rough with close
ly appressed bristles dividing into several
nearly upright branches. Leaves alternate
bipinnate rough the leaflets opposite and
the terminal one longer. Um-

hels terminal erect of numerous rays thus
little spreading & furnished with a short
Invol.^m of several sharp rough entire leaves
the partial Inv.^m is somewhat formed. Par
tial Umbels flattish dense. Flower radi
ant or irregular. The is no great degree
Fruit small rough with simple encircling
bristles. its summit tinged with purple
This *Caulis* is neither noxious nor re
markable for any properties of known vir
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Soverbydel^t Pap^r 1 1794

CAUCALIS nodosa.

Knotted Caulalis.

PENTANDRIA Digynia.

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, striated, rough with rigid bristles. Some flowers abortive.

SPEC. CHAR. Umbels lateral, simple, nearly sessile.

SYN. *Caucalis nodosa*. *Huds. Fl. An.* 114. *With. Bot. Arr.* 273. *Relb. Cant.* 111. *Sibth. Oxon.* 93.

C. nodosa echinato femine. *Raii Syn.* 220.

Tordylium nodosum. *Linn. Sp. Pl.* 346.

COMMON on banks and about the borders of fields, especially on a gravelly or calcareous soil, flowering from May to July, after which its dry stalks and heads of seeds remain for a considerable time, and become bleached at length by the weather.

Root annual. Stems prostrate, branched, leafy, striated, roughish with reflexed hairs. Leaves bipinnate, and sharply cut; opposite to each of which, and often partly embraced by its sheathing footstalk, stands a small simple umbel of several minute, white or reddish, scarcely radiating, flowers, each on a very short flowerstalk, and surrounded by linear hairy involucra. The germens and seeds, both in the Linnæan specimens and in ours, are all rough, the inner ones with warty points, the outermost, and especially on their outside, with longish, straight, rough, rigid hairs, as in other species of *Caucalis*, to which genus (and not to *Tordylium*) this plant is surely to be referred upon that account, whether it has any abortive flowers or not. Future observations must decide whether the smoother seeds of the centre are ever really abortive, or destitute of a vegetative principle. Practical observers of nature in the country have it in their power to clear up many points of this kind, relative to the most common plants, which, if communicated from time to time to those who have the means of making them public, would materially advance the interests of science.

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"J. Tournefort del. Aug. 1704.

CAUCALIS daucoides.

*Small Caulis or Bastard Parsley.**PENTANDRIA Digynia.*

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, striated, rough with rigid bristles. Some flowers abortive.

SPEC. CHAR. General umbels three-cleft, without involucre: partial ones ripening about three seeds, and furnished with a three-leaved involucre.

SYN. *Caucalis daucoides.* *Linn. Syst. Veg. ed. 14.* 276.
Huds. Fl. An. 112. With. Bot. Arr. 271. Relb.
Cant. 109. Sibth. Oxon. 92.

C. leptophylla. *Huds. Fl. An. ed. 1.* 99. *Linn. Sp. Pl. ed. 1.* 242? *ed. 2.* 347.

C. tenuifolia, flosculis subrubentibus. *Raii Syn. 219.*

C. albis floribus. *Ger. em. 1021.*

FOUND, though rarely, in cornfields where the soil is dry and chalky, most plentifully in Cambridgeshire, flowering in the early part of summer.

The root is annual and tapering. Stem branched and divaricated, somewhat zigzag, deeply grooved, a little hairy at the joints only. Leaves three-cleft at their base, then thrice compounded, their segments very narrow, divaricated, pointed, decurrent and smooth, of a pale green. Umbels lateral and terminal, on long footstalks, of scarcely more than 3 rays, though those are sometimes accompanied by 1 or 2 weak and barren ones. General involucre none. Partial umbels of about 5 almost sessile flowers, of which 3 only perfect their seeds, and are accompanied by 3 small lanceolate involucella. Petals nearly equal, generally reddish. Germen and seeds clothed with rigid hooked bristles, intermixed with hairs, but we do not perceive those hairs to be, as Linnæus says, verticillated. That author is singularly confused in his accounts of this genus, nor are we quite sure of what he meant at first by *C. leptophylla*. It is however certain, that the long description of *C. daucoides* in both editions of *Sp. Pl.* belongs to *C. grandiflora*, and not (as erroneously mentioned in *Syst. Veg.*) to *C. platycarpus*, whatever Linnæus might at any time intend by the latter.



Cheney del Aug 1 1794

CAUCALIS latifolia.

Broad-leaved Caulalis.

PENTANDRIA Digynia.

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, striated, rough with rigid bristles. Some flowers abortive.

SPEC. CHAR. General umbels three-cleft, with membranous involucre: partial ones ripening about 5 seeds. Leaves pinnated, serrated.

SYN. *Caucalis latifolia*. *Linn. Syst. Veg. ed. 14.* 276. *Huds. Fl. An.* 113. *With. Bot. Arr.* 271. *Relb. Cant.* 110.

C. arvensis echinata latifolia. *Raii Syn.* 219.

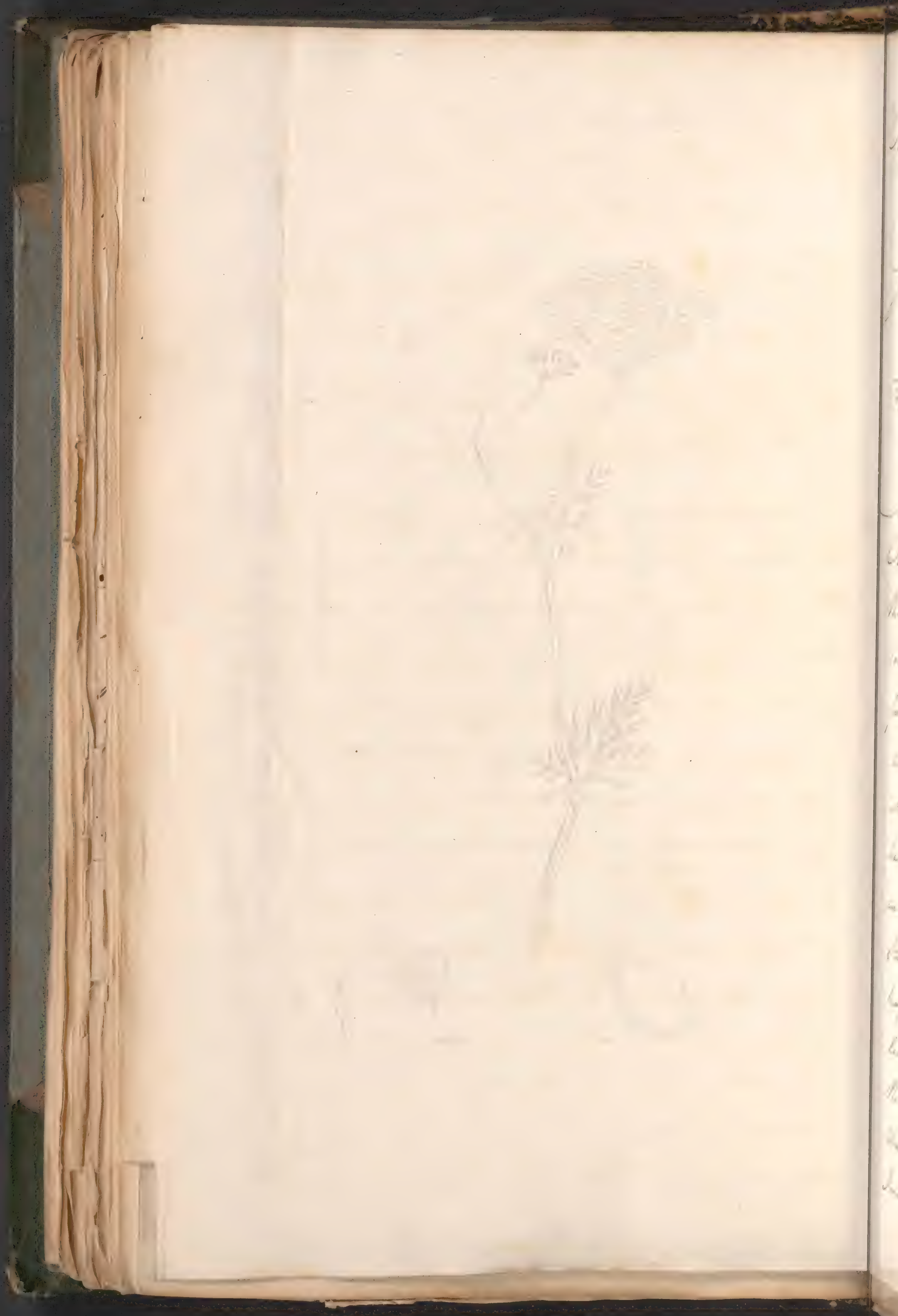
Tordylium latifolium. *Linn. Sp. Pl.* 345. *Huds. Fl. An. ed. 1.* 98.

THIS is rather less frequent than the last, but thrives in the same kind of soils and situations. It is one of the most beautiful of umbelliferous plants, and makes a conspicuous appearance in the dry fields of Cambridgeshire in July.

Root annual. Stem taller and less spreading than in *C. dauroides*, but as deeply furrowed, and more rough. Leaves rather glaucous, rough, simply pinnated, serrated; the lower pair of leaflets sometimes compound at the base. Umbels of rarely more than 3 rays, with a general involucre of 3 or 4 short ovate leaves, ribbed in the middle, with a membranous border. Partial umbels of several nearly sessile flowers, of which about 5 come to perfection. Partial involucre like the general ones. Flowers red, a little radiate. Seeds very rough with reddish upright straight rough bristles.

Section 12

The following is a list of the names of the persons who have been admitted to the membership of the Society since the last meeting of the Executive Committee. The names are given in alphabetical order of their surnames. The names of the persons who have been admitted to the membership of the Society since the last meeting of the Executive Committee are given in alphabetical order of their surnames. The names of the persons who have been admitted to the membership of the Society since the last meeting of the Executive Committee are given in alphabetical order of their surnames.



Bunium flexuosum Comm. East. Ind.
Centandria Asyriaca

Fruct. Inv.^m general & partial. Corolla
 uniform Umbels dense Fruit ovate

Spec. Ch. Fruct. Inv.^m of scarcely 3 leaves
 Stem at the base tapering & marked

A well known Inhabitant of gravelly
 Pastures whose white flowers are conspicuous
 thro' the month of June & whose roundish fleshy
 roots are eagerly sought by Boys & perhaps
 for their sweetish pungent flavor than for the
 amusement of tracing them to their deep situa-
 tion by means of the slender tapering & tender
 basis of the stem. If this Once be lost it is not
 easily recovered. These roots are perennial
 stem about a foot high smooth branched &
 leafy upwards. Leaves 3 primate with narrow
 linear uniform segments smooth bright green
 the radical ones on long tapering petioles
 Umbels terminal each of many rays. Fruct.
 Involut.^m of 1 to 3 small linear leaves often

altogether wanting. Prothall of several
dark leaves. Petals regular. Fruit o-
vate smooth tipped with purple

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SELINUM palustre.

*Marsh Milky Parsley.**PENTANDRIA Digynia.*

GEN. CHAR. *Fruit* oval-oblong, compressed, striated down the middle. *Involucra* general and partial, reflexed. *Petals* heart-shaped, uniform.

SPEC. CHAR. *Milky*. Root generally single. Stem solitary. Styles much divaricated after flowering. Petals involute.

SYN. *Selinum palustre*. Linn. *Sp. Pl.* 350. Huds. *Fl. An.* 115. *Witb. Bot. Arr.* 281.

GATHERED by Dr. Smith July 28, 1794, in the ditches of a very wet reedy meadow between Norwich and Heigham, where it was first observed by Mr. Pitchford. Ray seems not to have known this plant to be a native of England.

Root somewhat spindle-shaped, with several fibres from the top. Stem solitary, erect, four or five feet high, hollow, deeply furrowed, not hairy, bright purple at the base, bearing five or six remote alternate leaves; the lowermost on long furrowed footstalks, with sheathing reddish stipulæ, and all twice or thrice oppositely pinnated, and cut into narrow, pointed, opposite or alternate, smooth segments, of which the terminal ones are longest. The upper part of the stem is alternately branched, in a corymbose manner, bearing many large, horizontal, compound umbels of white flowers, on pale purplish footstalks. Involucra of several shortish, dependent, lanceolate, pointed leaves, with membranous edges. Petals uniform, inflexed. Fruit elliptical, sharp edged.

The whole plant abounds with a white, bitter, foetid juice, of the consistence of cream, which soon dries to a brownish resin. The Russians are said to use the root instead of ginger.

Dr. Stokes justly remarks (*Bot. Arr.*) that Jacquin's *Selinum sylvestre*, figured in *Fl. Austriaca*, is this plant, and not the *sylvestre* of Linnæus. This we have verified by comparing original specimens. In both however the stem is furrowed. The difference of one having a solitary stem, the other a great number, seems more certain than the difference of the roots.

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ATHAMANTA Libanotis.

*Mountain Stone-Parsley.**PENTANDRIA Digynia.*

GEN. CHAR. *Fruit* ovato-oblong, convex, striated.
Petals uniform, inflexed, so as to seem notched.
Involucrum both general and partial.

SPEC. CHAR. Leaves bipinnated, flat. Umbels hemispherical. Seeds hairy.

SYN. *Athamanta Libanotis.* Linn. *Sp. Pl.* 351.
Relb. Cant. 113 fig. *With. Bot. Arr.* 283. *Huds. Fl. An.* ed. 1. 100.

A. Oreoselinum. *Huds. Fl. An.* 115. *With. Bot. Arr.* 283.

Apium petræum seu montanum album. *Raii Syn.* 218.

IN the time of Ray, this plant was known to grow wild on Gogmagog hills, Cambridgeshire; but from that period no botanist has met with it there till the year 1783, when it was detected by the Rev. Mr. Relhan, to whom we are obliged for the wild specimen here represented. Whether the plant Mr. Hudson gathered between St. Albans and Stoney Stratford be the same, we have no means of determining: probably it might. That gentleman rightly referred Ray's plant to the *A. Libanotis* in his first edition; but in the second, misled as it should seem by Linnæus in *Sp. Pl.* he calls it *A. Oreoselinum*, a very different species, as appears from the *Linn. Herb.* Hence arose the mistake of Dr. Withering, who has both plants in his *Bot. Arr.*

The root is perennial, running perpendicularly down, somewhat woody, bitterish, and pungent, bearded at the top with the fibrous remains of old leaf-stalks. Stem one or two feet high, erect, little branched, smooth, angular, and (as Ray observes) often very deeply furrowed. Leaves bipinnate; leaflets sessile, pinnatifid, with pointed entire lobes, firm, veiny, paler beneath, smooth, except a slight hairiness on the veins and margin. Footstalks dilated at the base, with a membranous border. Umbels terminal, erect, whitish. Involucra numerous, subulate, with a membranous margin, hairy. Flower-stalks, calyx, and germen, hairy, as is likewise the fruit. After flowering, the styles and top of the germen become purple, as Linnæus remarks. The umbels are sometimes proliferous. This plant blooms copiously in August. We have represented a magnified flower to shew the inflexion of the petals, and the half-ripe fruit with its purple divaricated styles.

Arkhamanta 1871

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Crothium Maritimum Sea Samphire

Pentandria Digyna

Genl. Inval.² general & partial -
 Fruit oval compressed striated - flowers
 regular cal. entire.

Sp. l. leaflets lanceolate fleshy

It is not uncommon on Dover Cliff
 & similar situations but the more univers-
 al *Salicornia* has not only usurped its
 English name Samphire (or Sampin as it
 is a corruption of the French St Pierre) but
 almost supplanted it at our tables as a pick-
 le tho' deficient in the aromatic flavour
 which is the recommendation of the *Crothium*
 The long perenn.^l branching Roots run deep
 into fissures of Rocks - the herb is bushy &
 succulent particularly its leaves which are
 tri- or tri-ternate entire & almost linear
 very unlike those of any other British um-
 belliferous plant their cal.² a little glaucous

Umbels dense hemispherical - General & partial invol: small ovate undivided. Flowers greenish white all regular & fertile - Their Petals incurved broad at the base whereas most of this tribe the Petals are furnished with claws. Fruit elliptical furrowed fleshy smooth

Herodotus 15

Heracleum Spondylium - Common Cow Parsnip

Pentandria Digynia

Fr. Fruit elliptical notched com-
pressed striated beveled in the margin
flowers radiant. Petals notched with an
inflexed point. General Involu^m deciduous
Sp. Lk. Leaves pinnate - leaflets pin-
natised cut & serrated

Every one knows the Cow Parsnip the largest
& most conspicuous of our common umbelliferous
plants whose tall stems & great white or red-
dish Umbels are to be seen throughout the
months of July by Road sides in thickets
groves borders of fields & even meadows
Root biennial tap shaped stem erect
branched leafy stout hollow furrowed &
rough mostly 4 feet high leaves large ternate
or pinnate variously pinnatised cut & serrated
downy beneath their common stalk furnished
with large inflated ribbed Stipules
Umbels flattish of many Rays - General
& partial Involucra of several lanceolate
sharp leaves the former imbricated soon falling off Petals
unequal irregularly heart shaped with an inflexed

tooth between the lobes, a circumstance common
to many flowers of this natural Order
but in none more conspicuous than in the
outermost petals of the present Plant
Fruit elliptical broad & flat smooth
with 3 ribs on each side

Leguminosae 2

Trifolium repens





Lige

9/10

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Dr

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Q. 12

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Continued

Only use these tags: ['p>*only*

Horne

around

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to the

Legistecium Cornubiense - Cornish Lavage

Pentandria Digynia

Gen. Ch. Invol. general & partial. fruit oblong with 3 ribs on each side. Cor. uniform Petals rolled in entire Cal of 5 teeth

Spec. Ch. Radial leaves twice compound cut stem leaves ternate lanceolate entire Furrows of the seeds obsolete -

It is remarkable that this Plant has never been found in any part of the World except Cornwall - when a Mr Stevens discovered it early in the present Century. It is perennial flowering in July & grows in bushy fields owing its preservation from cattle who according to Dr W.'s observation are very fond of it to the surrounding thorns & briars



T. ... 189.

GEN. CHAR.
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SPEC. CHAR.
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SYN. CHAR.
Fl. CHAR.
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S. CHAR.
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S I U M angustifolium.

Narrow-leaved Water Parsnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compressed, striated.
Involucrum general and partial, of many leaves.
Petals heart-shaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets irregularly lobed and serrated. Umbels on foot-stalks opposite to the leaves. Stem erect.

SYN. *Sium angustifolium.* *Linn. Sp. Pl.* 1672. *Huds. Fl. An.* 119. *With. Bot. Arr.* 292. *Relb. Cant.* 116.

S. erectum. *Huds. Fl. An.* ed. 1. 103.

S. five Apium palustre, foliis oblongis. *Raii Syn.* 211.

THIS is frequently found in ditches and rivulets, and having been originally considered by Linnæus as a variety of *S. latifolium*, was first established as a distinct species by Mr. Hudson. The Rev. Mr. Relhan sent this specimen from near Cambridge. It flowers in July and August.

Root perennial, creeping, so as to occupy much space. Stem upright, with whorls of radical fibres in its lower part under water, round, striated, smooth, much branched above. Leaves alternate, simply pinnated; leaflets sessile, the lowermost pair remote from the rest, and smaller, at least in the lower leaves, in which also the leaflets are obliquely heart-shaped at the base; otherwise they are lanceolate, often so deeply lobed as to become hastate, pointed, very irregularly and sharply serrated, and very smooth. The umbels stand solitary, opposite to each leaf, on divaricated footstalks somewhat shorter than the adjoining leaf. General involucrum of many drooping leaves, which are occasionally entire, serrated or pinnatifid; the partial ones are oval and more entire. Calyx of five minute teeth. Petals heart-shaped, with an inflexed claw from the sinus, all uniform. Stamina twice as long as the corolla, spreading. Fruit smooth, slightly ribbed, oval.



5. 11. 5. 11. 1. 794

GEN. CHAR.
SPEC. CHAR.
SYN. CHAR.

SENT by
common, and
throughout
overlooked
one of the
root, creeping
deeply furrow
ternate leaves
in breadth, the
which resemble
well as in an
such as grow
are terminal,
size and
small.
It is a plant
roots.

S I U M latifolium.

Broad-leaved Water Parsnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compressed, striated.
Involucrum general and partial, of many leaves.
Petals heart-shaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets oblong-lanceolate, equally serrated. Umbels terminal.

SYN. *Sium latifolium*. *Linn. Sp. Pl.* 361. *Huds. Fl. An.* 118. *With. Bot. Arr.* 291. *Relb. Cant.* 115. *Sibth. Oxen.* 96.

S. latifolium foliis variis. Raii Syn. 211.

SENT by Mr. Woodward from Norfolk, where it is not uncommon, nor is it of very rare occurrence in rivers and fens throughout England; but the umbelliferous tribe has been more overlooked than most others, except Cryptogamia. This is one of the largest British plants of that tribe. Its perennial root, creeping among mud and gravel, throws up round, hollow, deeply furrowed stems 4 or 5 feet in height, clothed with alternate leaves, composed of 7 or 9 leaflets, which vary much in breadth, but are always very equally and neatly serrated, in which respect they differ materially from *S. angustifolium*, as well as in being much longer. Mr. Hudson well remarks, that such as grow under water are often laciniated. The umbels are terminal, large, and many-flowered. Involucra various in size and figure, sometimes lobed and often serrated. Seeds small.

It is a plant of an acrid poisonous quality, particularly the roots.

95

[Faint handwritten text, likely bleed-through from the reverse side.]

Scion 17





Quercus nodiflora. Procerum

Water Parsnip

Potamogeton amplifolius

Sp. 1. Fruit nearly oval, compressed
striated Involucrum general & partial
of many leaves. Petals heart shaped uniform

Sp. 2. Leaves pinnated leaflets ovate
equally serrated Umbels axillary opposite
to the leaves - Stem procumbent

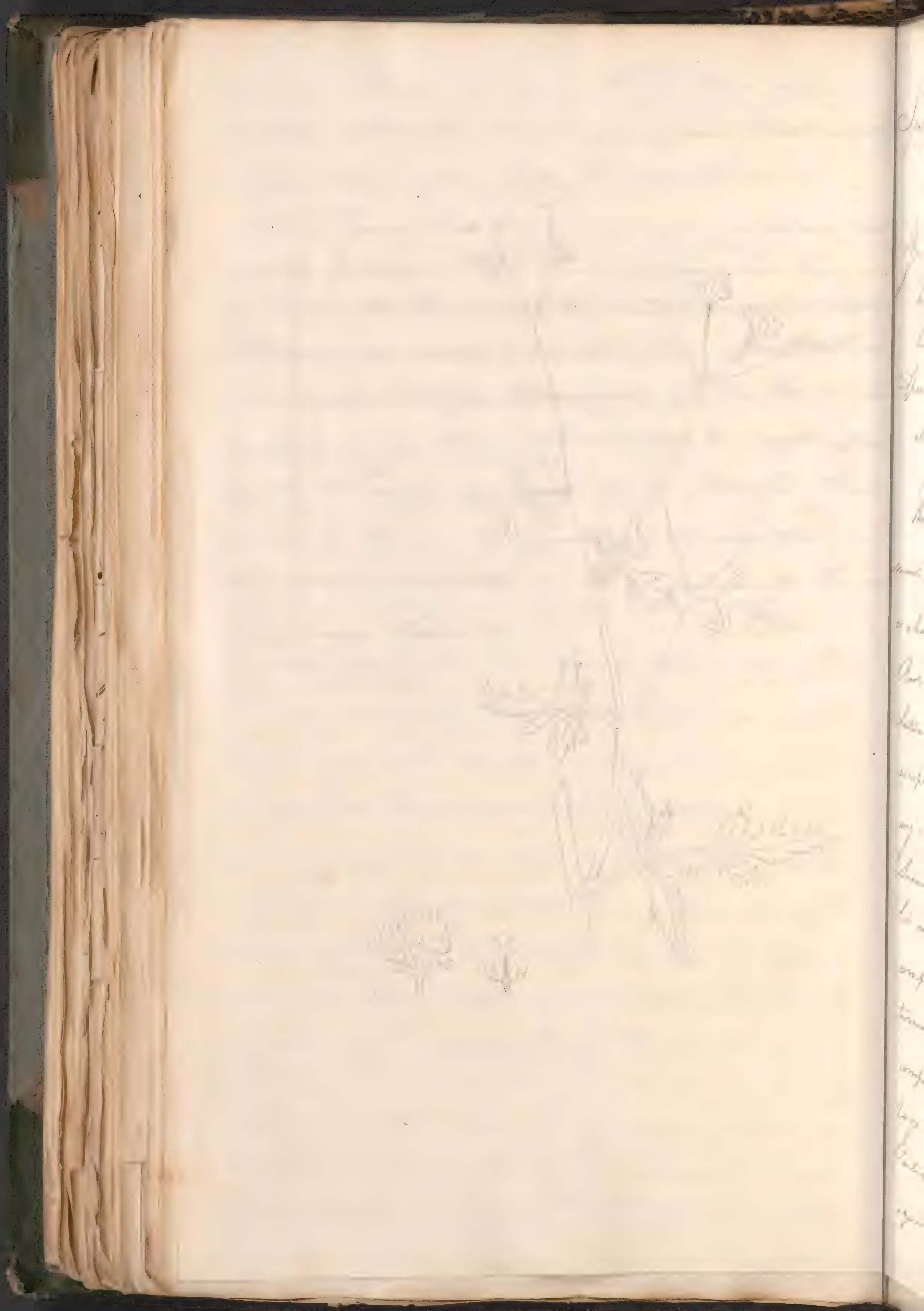
Frequent in ditches & rivulets as at
St. Georges fields & similar situations flowering
about July & Aug. Root perennial
creeping, various in length branched round
hollow slightly striated smooth leafy

Leaves pinnate of from 5 to 9 sessile ovate
leaflets, which are all nearly & equally ser-
rated the odd one largest. & sometimes united
with the neighbouring pair. Umbels later-
nal opposite to the leaves solitary nearly
sessile of about 5 or 7 disarticulated rays, bear-
ing little umbels of 12 or more flowers. Gen-
eral Involucrum of but 1 leaf & often en-
tirely wanting. Partial of several ovate

conceal leaves as long as the partial flower
stalks - flowers small greenish white with
slight traces of a Cal. Fruit ovate -

This Plant has been recommended in cut-
aneous diseases & for that purpose has been re-
tained in the London Pharmacopoeia & Dr
Woodville's valuable work Dr Wither-
sow prescribes 3 large Spoonfuls of the Juice 2
a Day in milk - It cannot be confounded
with *S. angustifolium*. as in that the Stem
is erect leaves unequally cut, umbels or
long flower stalks with a general Invol-
of many leaves -

Simon 18.



Lison Anomum — Hedge Honewort

Lentandria Sisyria

Genl Ch Fruit ovate striated. Involucra
both general & partial each of about 4
leaves. Petals lanceolate inflexed

Spec Ch Leaves pinnate. Umbels erect of
about 4 Rays

This occurs not very infrequently in rather
moist spots under ledges where the soil is marly
or chalky. flowering in the latter pt. of summer.
Root annual or biennial spindle shaped with
lateral branches. Stem erect 2 or 3 feet high
except in dry places much branched & spread
ing rather terete round furrowed smooth leafy
leaves pinnate with a terminal lobed leaf
let unequally serrated the upper ones more
compound or divided. Umbels numerous
terminal solitary, upright when in flower
composed of about 4 or seldom more unequal
rays. with a small 4 leaved general Invol^m
Partial Umbels likewise of best few & an
equal rays with a minute 4 leaved partial Invol^m

Flowers of 5 white imbricated petals. broader than
those of *S. syriacum*. Cal. scarcely perceptible.
Fruit ovate short compressed ribbed.

The seeds are aromatic & pungent when ripe
& dry but in an early stage they like the
whole herb have a peculiar nauseous
smell.

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Pastinaca sativa L.

SISON inundatum.

*Water Honewort.**PENTANDRIA Digynia.*

GEN. CHAR. *Fruit* oval, striated. *Involucra* both general and partial, each of about four leaves.

SPEC. CHAR. Creeping. General umbel of only two rays, and wanting a general involucre.

SYN. *Sison inundatum*. *Linn. Sp. Pl.* 363. *Huds. Fl. An.* 120. *With. Bot. Arr.* 295. *Relb. Cant.* 117. *Sibth. Oxon.* 98.

Sium pusillum, foliis variis. *Raii Syn.* 212.

THIS we believe is not a very unfrequent inhabitant of wet places that are overflowed in winter, as well as of ditches and pools among other aquatics. Most authors, except Ray, make it annual. Others, as Linnæus, do not pretend to decide upon its duration, in which class we must humbly rank ourselves, only observing that from its flowering so early as May, it is probably at least biennial.

The round, partly floating, stem throws out a few long simple fibres from the bottom, and is furnished with alternate pinnated leaves, whose membranous sheathing stipulæ embrace the stem. Such leaflets as are above the water are commonly wedge-shaped, and three-cleft, sometimes elliptical and undivided; those that are under water, especially at any depth, are finely divided into capillary segments, as in *Ranunculus aquatilis*. See a good remark on this subject in Ray's Synopsis, 212. The umbels are placed opposite to each leaf, just within the stipula, on longish footstalks, and consist of only two partial umbels, without any general involucre. Each partial umbel has about five white, slightly radiant, flowers, with oval, entire, spreading petals. Fruit compressed and striated.

We cannot help thinking this plant belongs rather to *Hydrocotyle* than to any other genus.

Edm

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S I S O' N verticillatum.

Whorled Honewort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval, striated. *Involucra* both general and partial, each of about 4 leaves.

SPEC. CHAR. Leaflets in capillary, whorled segments.

SYN. *Sison verticillatum*. *Linn. Sp. Pl.* 363. *Huds. Fl. An.* 120. *With. Bot. Arr.* 295. *Lightf. Scot.* 1096. *t.* 35.

A STILL more uncommon plant than the last. Mr. Mackay, nurseryman, near Edinburgh, sent a young root of it from Scotland, which flowered the following year, and from thence our figure was taken. It grows in moist meadows in the lowlands of North Britain, and has also been observed in considerable plenty in the flat parts of Wales. It is perennial, flowering about July and August.

The root consists of oblong fleshy radicles, tapering to a point. Stem 12 or 18 inches high, erect, round, striated, but little branched, and almost naked. Leaves mostly radical and very remarkable, consisting of a simple rib, along which are arranged pairs of deeply cloven leaflets, whose numerous segments are linear, acute, extremely narrow, pointing in all directions, so as to form whorls, and that as truly as the flowers do in the *Mentha* and other whorled plants, properly so called, for those grow only on two sides of the stem, though they seem to embrace it all round. Umbels erect, of about 8 or 10 rays, with a general involucre of 3 or 4 short ovate pointed leaves. Partial umbels more dense, and nearly flat, with similar, but more numerous, involucre. Petals nearly equal, inflexed, white. Antheræ purplish. Germen ovate, striated. Fruit slightly compressed, deeply furrowed, crowned with the short recurved permanent styles. The seeds are slightly, but not pleasantly, aromatic.

100

100



SISON fegetum.

*Corn Honewort.**PENTANDRIA Digynia.*

GEN. CHAR. *Fruit* oval, striated. *Involucra* both general and partial, each of about four leaves.

SPEC. CHAR. Leaves pinnated; leaflets roundish. Umbels drooping.

SYN. Sison fegetum. *Linn. Sp. Pl.* 362. *Huds. Fl. An.* 120. *With. Bot. Arr.* 294. *Relb. Cant.* 117. *Sibth. Oxon.* 97.

Sium arvense five fegetum. *Raii Syn.* 211.

Selinum Sii foliis. *Ger. em.* 1018.

COMMUNICATED from fields near Kelmarth, in Northamptonshire, by William Hanbury, Esq. It has been observed in several parts of England in a chalk or clay soil, but not very frequently. Messrs. Forsters find it at Walthamstow. It flowers in July, and is annual in general, though often biennial, as we find remarked by that accurate observer Mr. John Goodyer, in Gerarde's Herbal. His whole account of this herb, with the origin of its name *Honewort* (from its curing a swelling in the cheek, called a Hone), with all the history of "Mistress Ursula Leigh," and "Mistress Charitie Leigh," is a model of accurate inquiry and precise information.

Root small, but strong. Stems several, spreading in every direction, slender and rush-like, but branched and furnished with several alternate pinnated leaves. The radical leaves are the largest, consisting of from seven to fifteen neat little roundish leaflets, sharply serrated, and scarcely lobed. The general umbels are of very few and unequal rays; the partial ones are drooping, and, as Goodyer says, "uneven or unorderedly," their flower-stalks being very various in length. Flowers very small. Petals regular, incurved. Antheræ purple. Fruit striated, pungent and aromatic, as is the whole plant in some degree.



OENANTHE *peucedanifolia*.*Sulphur-wort Water-dropwort.**PENTANDRIA Digynia.*

GEN. CHAR. *Florets* irregular: those of the disk
sessile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets all linear. General involucre
none. Knobs of the root sessile, elliptical.

SYN. *Oenanthe peucedanifolia*. *Pollich Plant. Palat.*
vol. 1. 289. t. 3. Sibth. Ox. 98.

SENT by W. Mathew, Esq. from near Bury, and by the
Rev. Mr. Abbot from the neighbourhood of Bedford. Professor
Sibthorp also found it in several places about Oxford, as men-
tioned in his Flora. No other British author has noticed this
species, probably having confounded it with *O. pimpinelloides*,
which is rather a maritime plant, while *peucedanifolia* grows in
fresh inland waters.

The root of this consists of thick oval or elliptical knobs,
which taste something like parsnep, but are probably dangerous
food. Stem thicker than in the preceding, as well as taller and
more erect. Radical leaves bipinnate; stem-leaves scarcely
more than pinnate; leaflets all linear and acute, by which it is
at once distinguished from the preceding, as well as by the want
of a general involucre, of which there are scarcely ever any
signs. The rays of the general umbel are also fewer and much
thicker than in *O. pimpinelloides*, and the calyx is more erect.
The flowers appear in June, and are often reddish, the marginal
ones frequently female only, being impregnated by those of the
centre.



OENANTHE fistulosa.

Common Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: those of the disk sessile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Root sending forth runners. Stem-leaves pinnated, cylindrical, tubular. General involucre, for the most part, wanting.

SYN. *Oenanthe fistulosa*. Linn. *Sp. Pl.* 365. Hudf. *Fl. An.* 121. With. *Bot. Arr.* 296. Relb. *Cant.* 117. Sibth. *Ox.* 98.

O. aquatica. Raii *Syn.* 210.

EXCEEDINGLY common in wet ditches, ponds and rivers, flowering in July. The root is fibrous and perennial, sending forth under water several creeping runners, by which it is increased, and throwing up tall branching stems to a considerable height above the surface. These stems are tubular, contracted at the joints, striated, of a glaucous hue. Radical leaves bipinnate; the leaflets flat, wedge-shaped and lobed: stem-leaves alternate, pinnate; their leaflets and common footstalks cylindrical and hollow. Umbels on long, strong, alternate stalks, lateral and terminal: general rays from 3 to 7 or 8, mostly naked, but sometimes furnished with one linear leaf of an involucre: partial umbels with many rays, and a partial involucre of several membranous leaves. Calyx-teeth sharp and always spreading. Petals very unequal, with incurved points. Stamina long. Styles after impregnation much elongated, and erect, giving the ripening umbels a bur-like appearance. Stigmas capitate.

The variety β of Hudson is a very trifling one. Dr. Stokes observes that in some situations this species acquires the habit of *O. pimpinelloides*, but may be readily known by the want of a general involucre. We presume this remark alludes to our *O. peucedanifolia*, see t. 348.



Sept. 1894. Philadelphia. J. C. G. 10. 10. 10.

OENANTHE pimpinelloides.

Parsley Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: those of the disk sessile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets of the radical leaves wedge-shaped, cloven; those on the stem entire, linear, very long. General involucre of several linear leaves.

SYN. *Oenanthe pimpinelloides*. *Linn. Sp. Pl.* 366. *Huds. Fl. An.* 121. *With. Bot. Arr.* 297.

O. Staphylini folio aliquatenus accedens. Raii Syn. 210.

WE have received this from the Rev. Mr. Hemsted, and from the Rev. Mr. Hugh Davies. The latter gathered it in salt marshes near Aber, North Wales.

Root perennial, consisting of several slender fusiform fleshy tubercles, intermixed with fibres. Stem erect, or ascending, with so many angles as to be almost cylindrical, striated, smooth, leafy, not much branched. Radical leaves bipinnate; the leaflets either elliptical and entire, or wedge-shaped, and more or less cloven: Stem-leaves pinnate, scarcely bipinnate; leaflets long, linear and acute. Umbels terminal. Involucra of several linear leaves, the partial ones most numerous. Calyx of 5 unequal, sharp, spreading, considerable leaves. Petals unequal, with a point so inflexed as to render them inversely heart-shaped, as in many of this tribe, sometimes reddish on the back. The flowers appear in July, and perfect but few seeds.

This species is not esteemed poisonous, but the whole genus is certainly to be suspected, on account of the very dangerous *Oenanthe crocata*.

Example 3

THE FIRST PRINCIPLE

OF THE ART

OF THE ART

The first principle of the art is that the mind should be directed to the object of the art. This is the first principle of the art, and it is the first principle of the art. The second principle of the art is that the mind should be directed to the object of the art. This is the second principle of the art, and it is the second principle of the art. The third principle of the art is that the mind should be directed to the object of the art. This is the third principle of the art, and it is the third principle of the art. The fourth principle of the art is that the mind should be directed to the object of the art. This is the fourth principle of the art, and it is the fourth principle of the art. The fifth principle of the art is that the mind should be directed to the object of the art. This is the fifth principle of the art, and it is the fifth principle of the art. The sixth principle of the art is that the mind should be directed to the object of the art. This is the sixth principle of the art, and it is the sixth principle of the art. The seventh principle of the art is that the mind should be directed to the object of the art. This is the seventh principle of the art, and it is the seventh principle of the art. The eighth principle of the art is that the mind should be directed to the object of the art. This is the eighth principle of the art, and it is the eighth principle of the art. The ninth principle of the art is that the mind should be directed to the object of the art. This is the ninth principle of the art, and it is the ninth principle of the art. The tenth principle of the art is that the mind should be directed to the object of the art. This is the tenth principle of the art, and it is the tenth principle of the art.

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Phellandrium aquaticum Water Hemlock

Pentstemon agrynia

Gen. Ch. Gen. Invol. 0. Flowers all fertile

The central ones smallest. Fruit ovate
smooth crowned with the cal. & styles

Spe. Ch. Segments of the leaves divaricate

Frequent in running streams as well as
stagnant ditches flowering in June & July

Root spindle shaped thick with whisker
fibres. Stem 2 or 3 feet high thick round
hollow furrowed much branched & very
bushy the branches being greatly divari-
cated & mostly horizontal. Leaves spread-
ing their pinnate lobes all the segments
divaricate smooth of a dark shining
green. Umbels opposite to the leaves
spreading many rayed the partial ones
very dense. Partial Invol.: of many nar-
row leaves. Fruit ovate a little compressed
smooth crowned with the erect cal. &
styles

Recita 24



Cicuta virosa

Water Hemlock - Water Cowbane

Pentandria Digynia

en. Ch. No general Involucreum

Fruit nearly ovate furrowed. Cor.

~~always~~ ^{almost} regular

Spec. Ch. Umbels opposite to the leaves

Stipule running up the flower stalk,
blunt

Happily this dangerous Plant is not very
common. it grows in ditches & the margins
of Rivers always under water when young
in which situations Cows & Bullocks to which
Animals it is a deadly poison sometimes by mis-
take eat it - by what Haller has collected it
appears also to be poisonous to Man kind by
quickly inflaming the Stomach as well as to the
Canine genus - Horses Hays & Goats eat it
with impunity. Linnaeus in his Flor a Lapi-
donica gives a more exquisite detail of the

reasons which led him to conclude this Plant
to be cause of a terrible disease among the
at Tornaa in Lapland by which he rendered
invaluable Service to that Country

The Root is perennial stolonous & separated
internally into several cavities by transverse
partitions. Stem branched furrowed 3 or 4 feet
high. Leaves twice ternate the larger pinnate
their common stalk bordered a great way up
by a membranous blunt Stipula. Leaflets lan-
ceolate serrated smooth bright green. Umb-
els on footstalks various in length, opposite
to each leaf consisting of several principal
Rays (without any general Involucreum) &
still more numerous short partial Ray
encompassed by an Involucreum of many
narrow lanceolate leaves. Calyx somewhat
campanulate. Petals nearly all of a size red
in white. Fruit smalled of a short ovate fig
ribbed.

The *Cicuta virosa* can hardly be confounded with
any other British Plant if the form of the leaves
& Situation of the flowers be attended to. Its flower
is fetid & pungent - if unfortunately taken into the
stomach a speedy Emetic is the best Remedy or a dose
of Oil.

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CORIANDRUM fativum.

Coriander.

PENTANDRIA Digynia.

GEN. CHAR. *Corolla* radiate; *petals* inflexed, cloven.
General Involucrum of one leaf; *partial ones* going
but half way round. *Fruit* sphaerical.

SPEC. CHAR. The two seeds combining to make one
uniform globe.

SYN. *Coriandrum fativum.* *Linn. Sp. Pl.* 367. *Huds.*

Fl. An. 123. *With. Bot. Arr.* 302.

Coriandrum. *Raii Syn.* 221.

CORIANDER is supposed to be a native of the south of Europe, and, from having been cultivated in England as a medicinal plant, to have become naturalized in some parts of the kingdom, particularly in fields about Ipswich.

The root is annual; lower leaves lobed and cut; upper ones in very fine linear alternate segments; flowers white or reddish, appearing in June; and the seeds are ripe in July and August. The aromatic flavour of the latter is agreeable to most palates; and we are obliged to Dr. Withering, for rescuing them from the charge of unwholesomeness (*Bot. Arr.*). All the rest of the plant is, when bruised, abominably foetid.

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Scandix odorata - Sweet Cicely

Great Chervil

Pentandria Digynia

Gen. Ch. Gen Invo. 0. Flowers radiant

Petals notched fruit awl shaped -

Central flowers often male -

Spe. Ch. Seeds furrowed angular smooth

Sent from the North of England by Mr
Robson flowering in May

The Root we believe is perennial Spin-
dle shaped & aromatic - Stems $1\frac{1}{2}$ foot
high branched furrowed - Leaves bipin-
nate pale green hairy triffly winged & pinnu-
tifid Umbels terminal erect green
Rays - The partial Involucres lan-
ceolate reflexed membranous pale
Flowers white the central ones most nu-
merous & having abortive germens

Seeds large about an inch long erect
lanceolate acute not beaked furrowed
smooth of a shining green brown with a
sweet aromatic flavour & crowned by
the spreading styles

January 23



Scandix Anthriscus - Rough Chervil

Pentandria Aegyptia

Genl. Gen. Invol. 5. Flowers radiate
Petals notched four and shaped. Central
flowers often male

Spec. Pl. Seeds ovate bristly beaked
Cor uniform Stem smooth -

It is remarkable for growing almost
exclusively in the neighbourhood of large
towns - the banks of hedges & other very
dusty much frequented places abound with
it in Spring nor does the whole vegetable
Kingdom afford a more exquisite green
nor scarcely a more rich & elaborate foli-
age than the young plants of this *Scandix* dis-
play in the earliest months of the year

Its beauty in that state readily distin-
guishes it from all its neighbours In May
the flowers are in perfection & the herb soon
sows its seeds & withers away



CHÆROPHYLLUM fylvestre.

Smooth Cow-parsley.

PENTANDRIA Digynia.

GEN. CHAR. *General Invol.* none; *partial* reflexed, concave. *Petals* heart-shaped. *Fruit* oblong, smoothish.

SPEC. CHAR. Stem striated, smooth; slightly swelling below the joints.

SYN. Chærophyllum fylvestre. *Linn. Sp. Pl.* 369. *Sm. Fl. Brit.* 326. *Huds.* 124. *With.* 308. *Hull.* 63. *Relb.* 121. *Sibth.* 100. *Abbot.* 66. *Curt. Lond. fasc.* 4. *t.* 25. *Mart. Fl. Rust. t.* 96.

Cicutaria vulgaris. Raii Syn. 207.

FREQUENT about hedges in the borders of rather fertile pastures, flowering about the end of April or early in May, being one of our earliest umbelliferous plants.

Root perennial, spindle-shaped, slightly milky, but little branched. Stem about 3 feet high, erect, branched, leafy, round, striated, a little swelled below the joints, more especially as the plant advances in age; it is for the most part downy towards the bottom, but the upper part is sleek, and in general (though not always) devoid of pubescence. Leaves triply pinnate, the leaflets deeply cut, almost sessile, rough at the edge. Umbels when young more or less drooping, though commonly less so than in *C. temulentum*; as the flowers expand they become quite erect. *Involucella* ovate, membranous, fringed with thick-set white hairs. Flowers whitish; their stalks smooth. Petals more or less notched, rarely entire, a little irregular. Fruit oblong, somewhat elliptical, composed of 2 nearly cylindrical seeds, externally very slightly ribbed, and destitute of all roughness.

The whole herb has a sweetish carrot-like smell and taste, and is eaten by domestic cattle. Rabbits are said to be peculiarly fond of it.

The almost equally common *C. temulentum* is distinguished by its more swelling, spotted, and very rough stem, and bristly flower-stalks.

Cherophyllum Ry

Castanea 25





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Pastinaca Sativa. Wild Parsnip.

Pentandria Digynia

Gen. Ch. Fruit elliptical compressed almost flat. Petals involute entire. Involucre neither general nor partial. Spec. Ch. Leaves simply pinnate downy beneath.

Found in the borders of Fields & by Road Sides, plentifully enough on a calcareous Soil but not on any other, flowering in July. Root biennial, spindle shaped white aromatic sweet with a degree of acrimony. Stem 3 feet high erect branched angular furrowed roughish. Leaves pinnate with footstalks dilated at the base - leaflets from 5 to 9 sharply serrated & somewhat cut downy beneath the odd one in 3 lobes. Umbels terminal solitary erect of several roughish rays - Involucreum in general altogether wanting but sometimes a small solitary leaf occurs at the base of the general as well as partial flower stalks for it is well known to practical Botanists

that this part affords by no means such
certain generic Character, as *Herniaria*, &
Arctostaphylos. The Seeds being more to be
trusted. The flowers are small with
deep yellow petals rolled inwards. From
large elliptical flat ribbed smooth of a
very light brown when ripe. The *Garden*
P. is a cultivated variety of
this with larger smoother leaves & a
more salable Root



Fil. 1795. *Umbelliferae*. 9. *U. officinalis*.

GEN. CHA.
C. CHA.
SPEC. CHA.
SYN. CHA.
C. CHA.
C. CHA.

THIS is a
In many parts
varied as in
it now occurs
Burr. N. Am.
The root is
middle of the
large black
The fruit
three times
irregular. The
fuculent, and
and bitter.
ous parts of
name (Sila)
cause in the
been observed
Alexandria.

SMYRNIUM Olusatrum.

Alexanders.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oblong, angular. *Peta's* pointed, carinated. Many *flowers* abortive. *Involucra* none.

SPEC. CHAR. Stem-leaves in threes, on footstalks, serrated.

SYN. Smyrnium Olusatrum. *Linn. Sp. Pl.* 376.
Huds. Fl. An. 126. *With. Bot. Arr.* 310. *Relb.*
Cant. 123. *Sibth. Oxon.* 101.
 Smyrnium. *Raii Syn.* 208.

THIS is rather a maritime plant, and is found near the coast in many places; but whether from having been formerly cultivated as a pot-herb, or the seeds dispersed by any other means, it now occurs about many inland towns, as Nottingham, York, Bury, Newmarket, and about Mackerell's tower Norwich. The root is biennial, and the flowers appear in May. By the middle of July the stalks are dried up, but remain laden with large black seeds.

The stem is strong, deeply furrowed. Leaves large, twice or thrice ternate, cut and serrated. Flowers small, numerous and irregular. The whole herb is of a pale bright green, smooth, succulent, in flavour something like cellery, but more strong and bitter. It is now out of use, though formerly eaten in various parts of Europe, either as a salad or pot-herb, whence the name *Olus atrum*. Ray thinks it was called *Alexanders* because in Italy and Germany it had long been denominated *herba Alexandrina*, having been supposed to be brought from Alexandria.

Longman 26



Curcuma longa L.

PIMPINELLA faxifraga.

Common Burnet-Saxifrage.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* none. *Fruit* ovato-oblong, ribbed. *Petals* inflexed. *Stigmas* somewhat globular.

SPEC. CHAR. Leaves pinnate: leaflets of the radical ones roundish; those of the uppermost linear.

SYN. *Pimpinella faxifraga*. *Linn. Sp. Pl.* 378. *Huds. Fl. An.* 127. *With. Bot. Arr.* 313. *ed. 3.* 311.

Relh. Cant. 124. *Sibth. Ox.* 102.

P. faxifraga minor, *foliis Sanguisorbæ*. *Raii Syn.* 213, n. 2 & 3.

A NATIVE of dry gravelly and calcareous soils, flowering in July and August.

Root perennial, strong and woody, highly aromatic and pungent, to some persons not unpleasant, especially when dry. Stems about a foot high, erect, slender, rigid, round, striated and roughish, varying much in luxuriance, generally branched above. Leaves on long footstalks, pinnated, veiny, roughish and rigid; the leaflets of the first radical ones roundish or ovate, acutely serrated and generally deeply notched, especially the terminal leaflet; the other leaves are composed of decurrent, linear, often falcated, sometimes twice pinnatifid leaflets, those which grow high on the stem being the narrowest and most simple, and their common footstalk more membranous and dilated than in the rest. Umbels drooping when young, destitute of general or partial *involucra*. Flowers small, nearly regular, white, with long stamina. Top of the germen very tumid, and reddish. Styles short. Seeds small.

From repeated observations made on this plant wild in many different places, we entirely agree with Dr. Withering, that all the varieties enumerated in his 3d edition (except *P. orientalis* of Gouan, which we have never seen in England) really constitute but one species. Our figure is taken from a good intermediate wild specimen. The characters of almost all the varieties may be found in it. The botanist will in vain attempt to meet with the exclusive characters of any one of them in many different individuals. Such a kind of variety is like the ghost in Hamlet, or Mrs. Radcliffe's mysterious monk of Paluzzi; we can no sooner say "'tis here," than the next moment "'tis gone."



1779, Published by J. Smiley, London.

PIMPINELLA magna.

Great Burnet-Saxifrage.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* none. *Fruit* ovato-oblong, ribbed. *Petals* inflexed. *Stigmas* somewhat globular.

SPEC. CHAR. Leaves pinnate: leaflets ovate, the terminal one three-lobed.

SYN. *Pimpinella magna*. *Linn. Mant.* 219. *With. Bot. Arr.* 314. *ed.* 3. 313. *Relb. Cant.* 125. *Sibth. Ox.* 102.

P. major. *Huds. Fl. An.* 127.

P. saxifraga. *Raii Syn.* 213.

THIS species is less common than the preceding, and grows chiefly in woods and hedges in a calcareous soil, flowering in August or later. We received it from Mr. Robson. Dr. Smith observed it under the walls of York.

Root perennial, woody, like that of *P. saxifraga* in flavour, but rather weaker. Stem 2 feet or more in height, round, striated. Leaves on rather shorter footstalks than in the last described, pinnated, but of fewer leaflets (scarcely more than 3 pair), and those larger, ovate, or ovato-lanceolate, the terminal one more or less deeply three-cleft, and all strongly serrated. Sometimes, as it is reported, the upper leaves are deeply pinnatifid, but that is not generally the case. Flowers commonly white, about the size of the last, and like them in structure; but in alpine situations they often become rose-coloured.

Linnæus originally confounded this with the last, but was afterwards convinced of his mistake; it being very different in habit and size, and essentially distinguished by the form, as well as greater smoothness, of the leaves. Hudson always made them distinct.

Lyons 27

London

Lyons



Gopodium Podagria - Gout Weed

Pentandria Sisyria

Yewth - Genet or partial Inool. ^m o

Root oval oblong ribbed Petals heart
shaped with an inflexed point unequal

Sp. Ch.

A very general Weed in shady waste
Places very troublesome in gardens whose
soil is rich or moist as the creeping
roots spread to a wide extent & are diffi-
cult to extirpate - The flowers appear
plentifully in May & June but except
the roots are confined produce little seed
it has an acrid pungent Root supposed
to agree in qualities with the more active
Imperatoria or *Marten Root* & formerly used
as a Cataplasm in the gout It has also
been called Herb Gerard



July 1876 Published by J. Lowenby London

VIBURNUM Opulus.

*Common Guelder-rose, or Water Elder,**PENTANDRIA Trigynia.*

GEN. CHAR. *Cal.* superior, of five leaves. *Cor.* in five segments. *Berry* with one seed.

SPEC. CHAR. Leaves lobed; their foot-stalks set with glands.

SYN. *Viburnum Opulus.* *Linn. Sp. Pl.* 384. *Huds. Fl. An.* 130. *With. Bot. Arr.* 318. *Relh. Cant.* 127. *Sibth. Ox.* 104.

Opulus. Raii Syn. 460.

THIS shrub is common in woods and hedges in watery places, flowering early in June; the bright-red berries ripen about September, and towards the middle of October the leaves assume a beautiful pink-colour, affording another instance, in addition to that of the Cornel (see tab. 249), of a genus, mostly American, the leaves of which turn red in autumn. In gardens the Guelder-rose, bearing round bunches of abortive flowers only, is very common, elegantly grouping with the Lilac and Laburnum in the early part of summer.

It is a small bushy tree, smooth in all its parts. Leaves with three great, unequally serrated, lobes; their foot-stalks bearing several cup-like glands towards the top, and a pair or two of erect linear appendages, scarcely to be called stipulæ, near the base. Cymes of many white flowers; the perfect ones small, resembling elder; abortive ones in the margin, each consisting merely of a large irregular flat petal, without organs of fructification. Stigmas nearly sessile, close together. Berries drooping, very succulent. Seed flat, heart-shaped.



Viburnum L.

VIBURNUM Lantana.

Mealy Guelder-rose, or Way-faring Tree.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* superior, of five leaves. *Cor.* in five segments. *Berry* with one seed.

SPEC. CHAR. Leaves heart-shaped, ferrated, veiny, downy beneath.

SYN. *Viburnum Lantana.* *Linn. Sp. Pl.* 384. *Huds. Fl. An.* 129. *With. Bot. Arr.* 318. *Relb. Cant.* 126. *Sibth. Ox.* 104.*Viburnum. Raii Syn.* 460.

RAY mentions this shrub as growing in a clay soil. We have observed it most plentifully, and apparently in its true wild situation, in chalky places, as about Henley, Oxfordshire; not but that it occurs also here and there in the woods and hedges of most parts of England, flowering in May.

It is a thickly-branched shrub or small tree, growing to a larger size in the north of England (as Ray also remarks) than in the south; its twigs round, pliant, and mealy, with the same kind of tufted stellated pubescence as is found on the flower-stalks, backs, and even upper sides of the leaves. The leaves are opposite, as in the whole genus, somewhat elliptical, heart-shaped at the base, obtuse, ferrated, strongly veined, without stipulæ. Flowers in large terminal cymes, white, with yellowish antheræ. Stigmas sessile, very short and thick. Berries compressed. When young (as in our figure) they are red on the outermost side, yellow on the other; but when quite ripe they turn black. They have a little mealy astringent pulp. Seed large, flat and furrowed.

This is supposed to be the *Viburnum* of Virgil; but the poet says nothing by which it can be ascertained, mentioning it only in his 1st eclogue, ver. 26.

The leaves turn dark red in autumn.

Veneranda

et

[Faint, illegible text, possibly a list or table of contents]



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Sambucus Ebulus. Dwarf Elder or Danewort

Pentandria Trigynia

Gen. Ch. Cal. in 5 segments. Cor. 5 cleft

Berry with 3 seeds

Spec. Ch. Cymes with 3 principal branches

Stipula large. Stem herbaceous

The Dwarf Elder grows here & there on waste grounds throughout Britain not common - by this in great plenty wherever it occurs at all as the creeping Roots spread very far & are scarcely to be eradicated. It flowers after Midsummer & ripens its berries late in autumn which however like the fruit of other creeping rooted Plants are rarely perceived.

The Stem are herbaceous 3 feet high erect roundish furrowed leafy. Leaves pinnate & green smooth the leaflets ovate lanceolate acute serrated unequal & generally glandular at their base - Stipula large leafy occu-

rated sometimes accompanying a pair of leaf
as well as the whole leaf - Some terminal of
principal Branches & many smaller ones which
are hairy - All the flowers stand on foot stalks.
small. purple. Petals of a dull blood red. Stamens
thick white with red anthers. whose lobes are
tant. Berry globular of a purplish black. with
3 sometimes 4 seeds -

The whole plant is fatid & violently purgative

Samuel 2



Sambucus nigra. Common Elder

Pentandria Frigynia

Gen. Ch. Cal. in 5 segments. Cor. 5 cleft
Berry with 3 seeds

Spec. Ch. Cymes with 5 principal
branches. Sepals ovate. Stem a Tree

Abundant every where in Hedges & Groves
flowering in June & ripening its berries cop-
iously in Sep.

This Tree is as it were a whole Magazine
of Physic to our tie Practitioners nor is it
quite neglected by more regular ones. Ointments
are made of the green inner bark which is
also a strong purgative. The dried flowers
infused in Water are used in fomentations & in
Tea tho in the latter capacity they are sweetening
to the Nerves - The berries are boiled into a rob
which is really useful in sore throats & Catarrhs
& acts as a gentle laxative in febrile disorders -

The leaves laid in the subterraneous Paths of the

Mole drive it away & an infusion of them
extremely useful for curious gardeners to spray
the over the buds of such flowers as they
wish to preserve from minute Caterpillars &
few Insects can bear the Elder. The *Phalaena*
Sambucaria however feeds on this Plant &
the colouring of its delicate Wings seems to
imitate the blossoms



PARNASSIA palustris.

Grafs of Parnassus.

PENTANDRIA Tetragynia.

GEN. CHAR. *Calyx* five-cleft. *Petals* five. *Nectaries* five, heart-shaped, fringed with bristles terminated by little balls. *Capsule* with four valves.

SPEC. CHAR. . . .

SYN. *Parnassia palustris*. *Linn. Sp. Pl.* 391. *Huds. Fl.*

An. 131. *With. Bot. Arr.* 325. *Relb. Cant.* 129.

P. vulgaris et palustris. *Raii Syn.* 355.

PERHAPS the nectary of the *Parnassia palustris* is more elaborate in structure than that of any other British vegetable. We regret that its physiology is unknown. What share those capillary protuberances, tipped with pellucid globes, have in the formation of honey, is very doubtful, though that fluid is found about the lower part of the organ which supports them. These parts however form an excellent generic character, and there is but one species of the genus. Theoretical botanists are not agreed about its affinities, except that it is allied to *Drosera*, and we think also to *Dionæa* and *Saxifraga*, though Mr. De Jussieu separates them all widely; but he seems not decided in his opinion. The *Parnassia* agrees with *Saxifraga* in the wonderful oeconomy of its impregnation, which is performed by one of the stamina at a time coming over the stigma, and retiring again as soon as it has shed its pollen. Its place is then supplied by another, till all have presented themselves in turn, and then the stigma closes. Sometimes two come together, or nearly so. Rue exhibits the same phænomenon.

This plant is common on bogs in the northern counties as well as in Norfolk, and produces its elegant milk-white flowers in August and September. The petals are curiously veined with pellucid lines; they preserve their whiteness when dried. The stem is angular and twisted; root perennial.



STATICE *Armeria*.*Thrift.**PENTANDRIA Pentagynia.*

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy.
Petals five. *Seed* single.

SPEC. CHAR. Stalk simple, bearing a round head of
 flowers. Leaves linear.

SYN. *Statice Armeria.* *Linn. Sp. Pl.* 394. *Huds. Fl.*
An. 132. *With. Bot. Arr.* 326. *Relb. Cant.* 129.
Lightf. Scot. 173.

S. montana minor. *Raii Syn.* 203.

“THE most humble and most lofty of plants,” says Mr. Lightfoot; “it grows frequently upon the sea-shores, and upon the summits of the highest mountains.” Neither is it less common in Enl and Wales than in Scotland, in both kinds of situations. We have examined it from both, and found no difference between the specimens. Its favourite maritime soil is of the muddy kind. The constitution of this plant indeed seems of a very accommodating nature, for it grows equally well in any garden, even in the smoke of London, and is much used for edgings. From its readiness to thrive in any situation, the English name has probably been given. It flowers about July and August.

Root perennial, woody, bearing many thick tufts of lax, linear, channelled, smooth, entire leaves. Stalks varying much in height, round, naked, each terminated by a globular head of several flowers, encompassed with a many-leaved involucre, whose base is attached to a singular cylindrical membranous sheath, about an inch long, which invests the top of the stalk, its lower end being loose and lacerated, so that it seems to have been torn off from the root, and carried up with the young growing stalk. Calyx small, erect. Petals rose-coloured. Crown of the seed fringed.

Station 5-50



STATICE Limonium.

Sea Lavender.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy.
Petals five. *Seed* single.

SPEC. CHAR. Stalk panicled, round. Leaves smooth,
destitute of nerves, tipped with a small point.

SYN. Statice Limonium. *Linn. Sp. Pl.* 394. *Huds.*
Fl. An. 132. *With. Bot. Arr.* 327.

Limonium. *Raii Syn.* 201.

GATHERED last August by Lord Viscount Lewisham on Woldham Marsh near Rochester. The plant loves a muddy soil in salt marshes, or on the shores of great rivers washed by the tide, and flowers late. Scarcely any vegetable is more various as to luxuriance, being sometimes found with leaves scarcely an inch long, and not more than six or eight flowers in the panicle, while at other times it is even much more large and its flowers more abundant than in the specimen before us. The bright blue colour distinguishes it at a distance, and that colour is tolerably permanent. Though less magnificent than some foreign species of its genus, this is a very beautiful plant. Its appearance scarcely enough resembles lavender to justify the English name, nor has it any aromatic quality. The root is strong and perennial.



June 1795 Published by James Sowerby London.

S T A T I C E *reticulata.**Matted Sea Lavender.**PENTANDRIA Pentagynia.*

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy.
Petals five. *Seed* single.

SPEC. CHAR. Stalk panicled, prostrate; its branches zigzag, the barren ones bent back. Leaves wedge-shaped, a little pointed.

SYN. *Statice reticulata.* *Linn. Sp. Pl.* 394. *Huds. Fl. An.* 133. *Witb. Bot. Arr.* 327.

THIS species of *Statice* is hardly to be found in any other part of Great Britain than on the coast of Norfolk, where it covers many acres of muddy salt marshes with its blue flowers in July and August, especially about Wells, Cley and Holkham. Our specimen was gathered below Wisbeach, by the Rev. Mr. Hemsted.

Root strong, woody and perennial, bearing thick tufts of small, narrow, obovate, or wedge-shaped, leaves, slightly pointed, and entire. Stalks prostrate, destitute of leaves, very much branched, the branches zigzag, matted and entangled with each other, with an ovate, sharp, membranous bractea at each divarication. The bark in our specimens is a little crisped and tuberculated, which we do not observe in the Linnæan ones. Many of the branches are barren, and those often reflexed, but not always. Flowers few together in simple terminal spikes, erect, each enveloped in three or four larger sheathing bractææ. The ribs of the calyx, and the petals, are of a bright purplish blue, which turns white in drying.

There cannot be said to be a good figure of this plant extant. Plukenet's *t.* 42. *f.* 4. is most like *S. echioides*, and Boccone's *Sic. t.* 44. is too imperfect to be of any service.



L I N U M perenne.

*Perennial Flax.**PENTANDRIA Pentagynia.*

GEN. CHAR. *Calyx* five-leaved. *Petals* five. *Capsule* with five valves and ten cells. *Seeds* solitary.

SPEC. CHAR. *Calyx* and capsule bluntish. Leaves alternate, lanceolate, entire.

SYN. *Linum perenne*. *Linn. Sp. Pl.* 397. *Huds. Fl. An.* 133. *With. Bot. Arr.* 329. *Relb. Cant.* 130.

Linum sylvestre cæruleum perenne erectius, flore & capitulo majore, et

Linum sylvestre cæruleum perenne procumbens, flore & capitulo minore. Raii Syn. 362.

WE trust to the authority of Mr. Hudson, and the above-mentioned authors who have copied him, in making these two plants of Ray's Synopsis varieties of each other. Ray himself hints that he thought them such; and Hudson asserts he has gathered both from the same root; adding, that in the procumbent variety the stamina are shorter than the styles, in the erect one longer.

Linum perenne is found in the driest chalk soil of Northamptonshire, Cambridgeshire, and Norfolk. Its strong and knobbed woody root produces a multitude of slender stems, about a foot long, spreading in every direction, but more or less curved upward. Its flowers appear from June to August; they are of a delicate texture, and very elegant blue colour. The calyx, as Dr. Stokes observes, is quite smooth, and each of its leaves marked with five ribs; the middlemost of which is the strongest.

Lesson 2



Hand: 1709 Published by J. Smarby London.

L I N U M angustifolium.

Narrow-leaved Flax.

P E N T A N D R I A *Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5. *Caps.* with 10 valves and 10 cells. *Seeds* solitary.

SPEC. CHAR. Calyx obsoletely three-nerved, sharp-pointed, as well as the capsule, and linear-lanceolate three-nerved leaves. Stems numerous, a little inclined.

SYN. *Linum angustifolium.* *Huds. Fl. An.* 134.
With. Bot. Arr. 329.

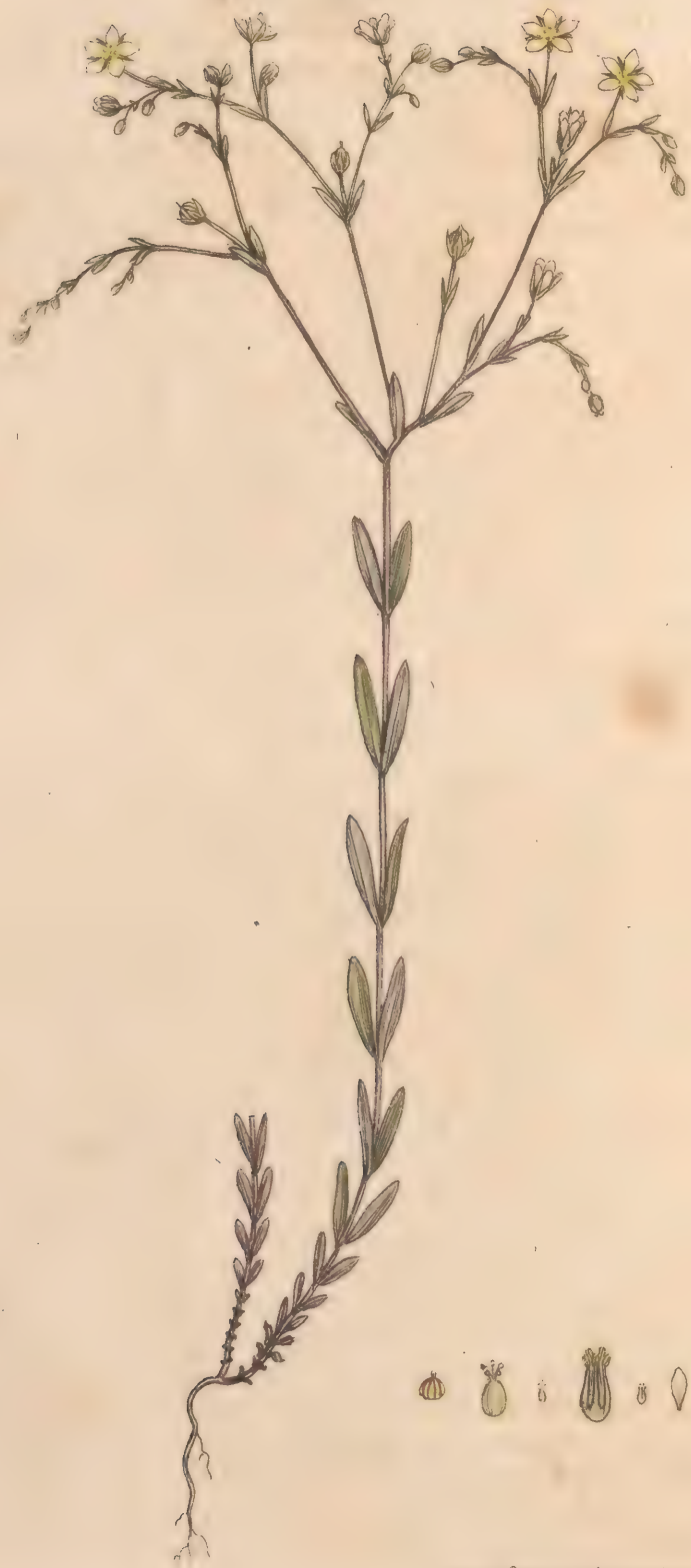
L. tenuifolium ? *Linn. Sp. Pl.* 399.

L. sylvestre angustifolium, floribus dilute purpureiscentibus vel carneis. *Raii Syn.* 362.

COMMUNICATED by D. E. Davy, Esq. who found it wild in great plenty at Darsham, Suffolk, flowering in July. It occurs in dry sandy pastures, especially near the sea; and is said to be most plentiful in Cornwall and Devonshire.

Linnæus very improperly confounded this with his *L. tenuifolium*, which has a very long-pointed calyx with glandular serratures, and leaves with rough edges and only a central nerve. That is Haller's No. 838, as we learn from Mr. Davall. Ours is most nearly allied to *L. usitatissimum* in the structure of all its parts, except in having a woody perennial root producing many stems; it differs also at first sight in having smaller paler flowers. The leaves have 3, sometimes 5, nerves, their edges entire and smooth. Calyx-leaves smooth, elliptical, with a sharp point; in the flowering state scarcely more than one nerve is visible, but as the fruit ripens the calyx becomes distinctly 3-nerved. The petals are entire, or slightly notched. Valves of the capsule distinctly 10, cohering by their inflexed margins, which make the partitions of the 10 cells. We have therefore altered the generic character, as M. de Jussieu has done, to 10 (not 5) valves. We cannot however agree with that learned botanist in referring this genus to his order of *Caryophylleæ*. Surely it belongs to the *Gerania*. The cells of the capsule are closely analogous to *arilli*, and about the rest of the characters there can be no doubt. See *Juss. Gen.* 303.

L. perenne, tab. 40, is sufficiently distinguishable from this species by its more obtuse 5-nerved calyx, and more capitate stigmas.



March 1737. Pultney-hill, London.

L I N U M catharticum.

*Purging Flax.**PENTANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5. *Capsf.* with 10 valves and 10 cells. *Seeds* solitary.

SPEC. CHAR. Leaves opposite, obovato-lanceolate. Stem forked. Petals pointed.

SYN. *Linum catharticum.* *Linn. Sp. Pl.* 401. *Huds. Fl. An.* 134. *With. Bot. Arr.* 330. *Relb. Cant.* 131. *Sibth. Ox.* 106. *Curt. Lond. fasc.* 3. *t.* 19. *Mart. Fl. Ruft. t.* 135. *Dicks. H. Sicc. fasc.* 3. 7.

L. sylvestre catharticum. *Raii Syn.* 362.

VERY common in dry open hilly pastures, where it may be found in flower from June to the end of August.

The root is annual and very small. Stems several, round, bowed at the base, then upright and simple, till they branch off into a forked, leafy, slender-stalked panicle. Leaves opposite, sessile, upright, inclining to an obovate or elliptical form, obtuse with a slight point, entire, glaucous beneath. The whole herb is smooth. When the panicle begins to branch off, its lower branches, as well as the leaves that accompany them, are alternate. Flowers terminal, solitary, drooping in the bud, then erect, white, not unlike those of an *Arenaria*. Calyx-leaves ovato-lanceolate, pointed, serrated, with a solitary nerve. Petals obovate, pointed. Stamina monadelphous. Stigmas capitate. Capsule with 10 valves, but before they are quite ripe they cohere in pairs by means of the permanent styles.

Gerarde calls this Mill-mountaine, and celebrates it as a purge on the authority of a Bishop of Bath and Wells, who used it commonly for that purpose. His receipt is a handful of the herb infused in a pint of warm white wine all night, and drunk in the morning. Dr. Withering recommends an infusion of 2 drams or more of the dried herb, as an excellent cathartic (and sometimes a diuretic) in many obstinate rheumatisms.

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Drosera rotundifolia - Round leaved Sun dew

Pentandria Hexagynia

Gen. Oct. Cal 5 sep. Petals 5 - Caps

supr of 1 cell with 3 valves - Seeds many

Sp. Lk. Leaves orbicular radial
depressed - Footstalks hairy - Stalks
bearing a simple Acumen -

Every *Drosera* hitherto discovered

grows in Bogg Situations - Our British

Species are far from uncommon in very

moor & boggy Bogs for the most part over

a gravelly or sandy Soil - They flower

in July & Aug. & are all we believe pe-

rennial - This is perhaps the most

common - its Root is black & fibrous

Leaves numerous on hairy footstalks

radial depressed & forming a sort of

Star on the ground or surrounding Moss

very conspicuous by their bright green

& red Color the latter of which chiefly

resides in the numerous glandular Bristles

each tipped with a cher armed Globule
which ornaments the Margin & Surface of the
leaves - & which by a degree of corollability
is lately observed by some Naturalists, as they
the contract & the expansion. Insects like the
Canadian *Dionaea* a Plant of the same
Natural Order. This corollability if its
effects is only to be detected in one sunny day
nor indeed as the flowers expand in any other
Weather. A few erect simple naked stalks
rise from the crown of the rosette each bearing
a simple Raceme or rather perhaps a
Spike of white or bluish col. flowers with
always 5 Petals & as many Stamens
& 3 pair of spreading recurved Styles. The
parts of fructification have not been found
to vary in this Species. Sometimes the
Stalk is reported to be branched.



Drosera longifolia - long leaved Sun Dew

Pentandria Hexagynia

Genl. Cal 5 cleft Petals 5. Caps.
superf. of 1 cell with 3 valves seeds many
Spec. Ch. leaves obovate radical up-
right - stalk bearing a simple racemus

This species is found in the same situ-
ations as *D. rotundifolia* tho somewhat
less frequently & flowers at the same
season - In root & general habit it
altogether agrees with the former differing
chiefly in its leaves which are not de-
pressed but nearly erect standing on long
stalks & their form is obovate not orbic-
ular - the footstalks of the leaves of *ro-*
tundifolia are hairy - of this & *anglica*
they are smooth & very fine this is still
constant - the styles of the *longifolia* vary
from 6 to 8 full as often as in *anglica*.
The Petals & Stamens are also frequently 6.



Dioscorea aspera Great San Juan
Pentandria Hexagynia

Genl — *aspera* —

Sp — leaves oblong obtuse radical
 upright, Styles 8. Caps. with 4 valves —

Linnaeus has not noticed this species
 it is far less commonly met with than

either of the others — We have gathered

it in Norfolk — It is most nearly

related to *D. longifolia* but is generally

twice as large — We have found 8 Petals

& as many Stamens in some Plants a

number exceeding any observed in the *longifolia*

The more elongated form of the Caps. pro-
 mises to be a good discriminating mark

The most distinct Character of this species

seems to consist in the oblong & almost

linear form of its leaves which we have

not found to vary —

Some theoretical Doctors find even
 the perpetual moisture on the Senegal

even in the greatest heat thought it would
be a good medicine for consumption Patients
whose moisture they supposed to be drying up
but good old Gerard confesses that they
who took this new restoration died the soon
which is no wonder considering its acrid
nature

Lehmann's

Plantation

Penicillium





Sibbaldia procumbens - Prostrate S.

Centandria Centogynia

Gentle Cal in 10 Segments Petals 5
standing on the Cal. Styles from the side
of the Germen. Seeds 5 in the bottom of the Cal.
Spec. Cal. leaflets wedge shaped 3 toothed

The summits of the Highland Mount
are covered with this which grows here
in a mouldering mimaceous soil full as
luxuriantly as in any garden & may be found
in flower throughout July - Root
woody tufted & perennial - Stems short
spreading & procumbent except sometimes
at their flowering extremities, leafy round
downy leaves on long footstalks with
a pair of oblong acute stipules like those
of a rose united to their base - leaflets
3 on short partial footstalks wedge shaped
terminating in 3 large teeth but otherwise
entire a little hairy - Flowers in a sort
of small leafy corymbose minute & incon-
spicuous with a hairy Cal. cut into 10

lobes alternately larger & smaller & bearing
5 little oblong yellow Petals & as many
Stamina placed on a thickened Reim as
is proper to the rosaceous Order to which
this Genus belongs - Germen of 5 nately of
10 little round embryos each bearing a
small lateral style - The Seeds are dry
small & roundish for Robert Sibthorp
first described & figured this Plant

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Ranunculus acris L.

MYOSURUS minimus.

Mouse-tail.

PENTANDRIA Polygynia.

GEN. CHAR. *Cal.* of 5 leaves, each with a spur at the base. *Petals* 5, with a tubular claw. *Seeds* numerous.

SPEC. CHAR.

SYN. *Myosurus minimus*. *Linn. Sp. Pl.* 407. *Huds.* 136. *With.* 326. *Relb.* 132. *Sibth.* 107. *Curt. Lond. fasc.* 4. t. 26.

Myosuros. *Raii Syn.* 251.

A NATIVE of gravelly corn-fields, not unfrequent about London. It has also been observed in several parts of Norfolk, always flowering in the early part of summer; after which it soon sheds its seeds, and withers away.

Root annual, fibrous, very small. Herb smooth, varying extremely in size according to the luxuriance of the soil. Stem none. Leaves numerous, nearly upright, a little fleshy, of a linear somewhat spatulate form, entire, pale green. Stalks several, upright, longer than the leaves, simple, round, a little thicker upwards, each bearing a small, erect, pale yellowish flower. Calyx of 5 elliptical concave leaves, spurred at the base below their insertion. Petals 5, scarcely longer than the calyx, pale, slender, consisting of a honey-bearing tubular claw, and a short spreading lanceolate border. Stamina generally about 5, but in luxuriant plants much more numerous, the length of the corolla, with vertical linear antheræ. Pistillum conical, longer than the stamina, composed of a conical receptacle, covered with a great number (even 2 or 3 hundred) of ovate, striated germens, each furnished with its own minute sessile stigma. This plant affords a remarkable and rare instance of a very great disproportion of males to females in the same flower, and yet the latter are generally all prolific. The seeds are justly described by Linnæus as naked; for the part which Jussieu denominates a capsule, is surely nothing more than a thickened inseparable coat, as in *Ranunculus*, to which the *Myosurus* very nearly belongs; there being the closest affinity between the nectariferous pore in the claw of the petals in that genus, and the tubular claw of *Myosurus*.

51 drawings
76 Sowerby plates

